

5. HydroBase Operations

Most of the information provided in the windows in HydroView and RiverPro are stored and edited in the Hydrologic Database (HydroBase) component of the WHFS. This chapter describes how these data can be accessed, reviewed and edited. The windows on the following pages are used in the operation of HydroBase. Where appropriate, a source window(s) (the window used to access the featured window) is provided in the background as a reference.

As noted in Chapter 1, this manual addresses some of the basic functional uses of HydroBase - the routine display, edit and addition of hydrometeorological data and information. The manual does not address the functional aspects of HydroBase in detail but provides an overview of the various screens that can be accessed in order to review or edit data in the database.

Maintenance of the static information in HydroBase is generally the responsibility of the Service Hydrologist, Hydro Focal Point, or designee. Access to HydroBase should be limited in the WFO through use of the **optional password function** in order to ensure its integrity. Additional information regarding the password function is provided in the Getting Started section and in the **HydroBase Administration Window**.

Note that many of the window options allow making a selection by either using the mouse and point-and-click or by using a "hot key" (a one or two key shortcut to performing an operation, e.g., Ctrl-X can be used to exit from HydroBase). Selections within HydroBase that are not applicable are greyed-out (e.g., the reservoir information quick reference tool bar button will be greyed-out if a forecast point which is not a reservoir is selected on the station listing display).

Active HELP buttons are provided for the Dam Catalog screens only.

Some screens in HydroBase reference various data codes for some parameters. These codes are as referenced in ***Standard Hydrology Exchange Format, Weather Service Hydrology Handbook No. 1***.

Troubleshooting HydroBase

Most errors associated with the use of HydroBase will be displayed in a pop-up window or through an error dialog shown on the screen. Generally, the pop-up window states the nature of the error (e.g., a date entered in an improper format). The HydroBase application usually continues once the error is corrected.

Getting Started

Method One

- 1) From the workstation D2D screen, locate the mouse pointer on a dead area (no windows displayed) and single click the right mouse button. The **System Control Menu** will be displayed.
- 2) Click left mouse button on **HydroApps**, the **Hydrologic Applications Menu** will be displayed.
- 3) Click left mouse button on **Hydro Database Manager** in the **Hydrologic Applications Menu**, the **HydroBase Root Window** will be displayed.

Method Two

- 1) From the D2D display, click on **Surface** on the Menu Bar.
- 2) Click left mouse button on **HydroApps**, a menu will be displayed.
- 3) Click left mouse button on **Hydro Database Manager**, the **HydroBase Root Window** will be displayed.

Password Function - If the **password option** is in use, the dialogue box shown in Figure 7 will be displayed requiring the entering of the password before the **HydroBase Root Window** is active. If no password is in use, an error dialogue box will appear instead reminding the user to set a password. The password is set under the **Setup/Administration** option accessed through the **HydroBase Root Window**.

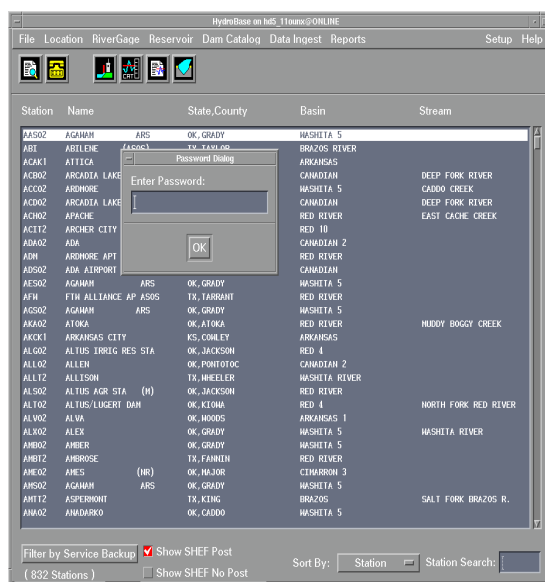


Figure 7. HydroBase Root Window with Password Dialogue Box

Exiting HydroBase

From the **HydroBase Root Window**, select **File** (Menu Bar), then *Click* on **Exit**.

HydroBase Windows

The following pages present the various windows used in the operation of HydroBase. A list of those windows is provided below.

HydroBase Windows

Window	Use	Page
HydroBase Root Window	Starting point to access all operations within HydroBase	5-7
Preferences Window	Customize the display features of the HydroBase windows	5-9
Add Location Window	Add a new location to the database	5-11
Modify Location Window	View and edit location data from the selected station	5-12
Contacts Window	View and edit contact data and information from the selected station	5-13
County/Zone UGC Window	View and edit county and zone Universal Generic Code (UGC) information from the selected station	5-14
Data Sources Window	View and edit data source information (DCP, Observer and Telemetry) from the selected station	5-15
River Gage Window	View and edit river gage information and data from the selected station	5-17
Flood Category Window	View and edit flood category definitions for a selected station	5-18
Impact Statement Window	View and edit impact statement definitions for a selected station	5-19
Flood Damage Window	View and edit flood damage statements for a selected station	5-20
Rating Curve Window	View and edit the rating curve for a selected station	5-21
Crest History Window	View and edit data and information for historical crests for a selected station	5-22
Low Water Window	View and edit data and information for historical low water occurrences for a selected station	5-23

HydroBase Windows

Window	Use	Page
Benchmark Window	View/edit data and information for permanent survey benchmarks for a selected station	5-24
Datum Window	View and edit data and information for gage datum (elevation of gage zeros from mean sea level) for a selected station	5-25
Description Window	View and edit general descriptive forecast point information for a selected station	5-26
Gage History Window	View and edit historical gage information for a selected station	5-27
Publications Window	View and edit information about publications that contain data from a selected station	5-28
References Window	View and edit information about references which describe where data records from the selected station are kept	5-29
Reservoir Window	View and edit reservoir information from a selected station	5-31
Dam Catalog Window	View and edit information on dams within the area of interest.	5-33
Dam Catalog Window (Information Examples)	Displays examples of data and information available through Dam Catalog	5-34
Dam Catalog Window (Dam Break Information Example)	Displays an example of dam break forecast data and information available through Dam Catalog	5-35
Ingest Filter Window	View and edit ingest filter information (controls the flow of data into HydroBase)	5-37
Quality Control and Alert/Alarm Limits Window	View and edit quality control parameters for data flowing into HydroBase)	5-38
Purge Parameters Window	View and edit parameters controlling the storage requirements for observed and forecast data and products	5-39
Flood Report Window	View flood hydrograph information at those locations which experienced flooding during the past twelve months	5-41

HydroBase Windows

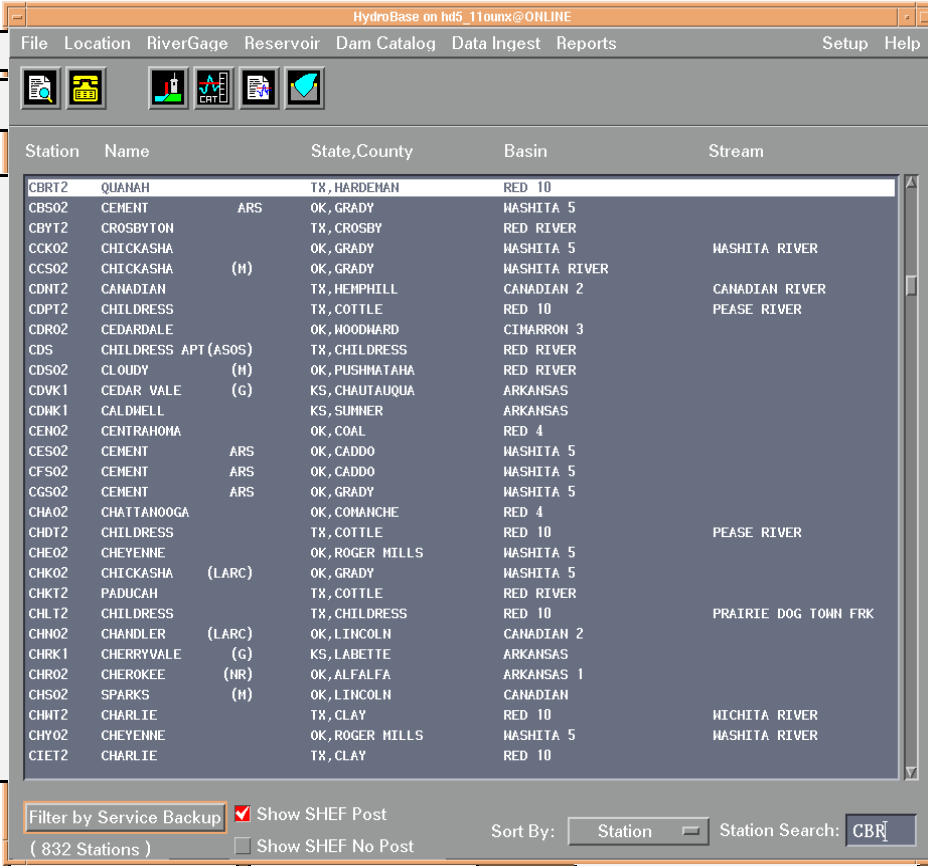
Window	Use	Page
Text Reports Window	View E-19 reports, cooperative observer reports, a sorted station list, a station classification list, and a service backup list	5-42
Administration Window	View and edit program administration information and set the HydroBase access password	5-44
Cities Window	View and edit city and town reference information	5-45
Reference Fields Window	View and edit the data contributors reference information (e.g., data sources, measurement devices, equipment owners, sponsors and supporting offices)	5-46
States/Counties/Zones Window	View and edit state, county and zone reference information	5-47
RiverPro General Parameters Window	View and edit various RiverPro parameters	5-48
RiverPro Forecast Groups/Points Window	Define forecast groups and order the groups and their forecast points for tailoring RiverPro displays and generated products and to select the primary stage parameter to use for each forecast point	5-49
Radar Locations Window	View and edit information for radars within the HSA	5-50
Stage II Parameters Window	View and edit data and information for Stage II parameters for selected radars within the HSA	5-51
Areal Definitions Window	View and edit areal definition data and information for zones, counties, basins and reservoirs within the HSA	5-52
Vector Definitions Window	View and edit vector definition data and information for rivers, streams, highways and roads within the HSA	5-53
NWR Transmitter Window	View and edit NOAA Weather Radio (NWR) transmitter information	5-54
Time Series Group Configuration Window	Customize time series displays for Group mode	5-55

HydroBase Root Window - Starting point to access all operations within HydroBase including station selection.

Menu Bar

Quick Reference Tool Bar

Text Display - station listing



The screenshot shows the HydroBase Root Window with the following components:

- Menu Bar:** File, Location, RiverGage, Reservoir, Dam Catalog, Data Ingest, Reports, Setup, Help.
- Quick Reference Tool Bar:** Contains icons for location, contacts, river gage, flood categories, impact statements, and reservoir information.
- Station Listing Table:**

Station	Name	State, County	Basin	Stream
CBRT2	QUANAH	TX, HARDEMAN	RED 10	
CBS02	CEMENT	ARS, OK, GRADY	WASHITA 5	
CBYT2	CROSBYTON	TX, CROSBY	RED RIVER	
CCK02	CHICKASHA	OK, GRADY	WASHITA 5	HASHITA RIVER
CCS02	CHICKASHA	(H), OK, GRADY	WASHITA RIVER	
CDNT2	CANADIAN	TX, HEMPHILL	CANADIAN 2	CANADIAN RIVER
CDPT2	CHILDRESS	TX, COTTLE	RED 10	PEASE RIVER
CDR02	CEARDALE	OK, WOODHARD	CIMARRON 3	
CDS	CHILDRESS APT (AS05)	TX, CHILDRESS	RED RIVER	
CDS02	CLOUDY	(H), OK, PUSHMATAHA	RED RIVER	
CDVK1	CEDAR VALE	(G), KS, CHAUTAUQUA	ARKANSAS	
CDWK1	CALDWELL	KS, SUMNER	ARKANSAS	
CEH02	CENTRAHOMA	OK, COAL	RED 4	
CEH02	CEMENT	ARS, OK, CADD0	WASHITA 5	
CFS02	CEMENT	ARS, OK, CADD0	WASHITA 5	
CGS02	CEMENT	ARS, OK, GRADY	WASHITA 5	
CHA02	CHATTANOOGA	OK, COMANCHE	RED 4	
CHD12	CHILDRESS	TX, COTTLE	RED 10	PEASE RIVER
CHE02	CHEYENNE	OK, ROGER MILLS	WASHITA 5	
CHK02	CHICKASHA	(LARC), OK, GRADY	WASHITA 5	
CHK12	PADUCAH	TX, COTTLE	RED RIVER	
CHL12	CHILDRESS	TX, CHILDRESS	RED 10	PRAIRIE DOG TOWN FRK
CHN02	CHANDLER	(LARC), OK, LINCOLN	CANADIAN 2	
CHR11	CHERRYVALE	(G), KS, LABETTE	ARKANSAS	
CHR02	CHEROKEE	(HR), OK, ALFALFA	ARKANSAS 1	
CHS02	SPARKS	(H), OK, LINCOLN	CANADIAN	
CHN12	CHARLIE	TX, CLAY	RED 10	HICHITA RIVER
CHV02	CHEYENNE	OK, ROGER MILLS	WASHITA 5	WASHITA RIVER
CIET2	CHARLIE	TX, CLAY	RED 10	
- Filter and Search Section:**
 - Filter by Service Backup: ☐ (832 Stations)
 - Show SHEF Post: ☒ Show SHEF No Post: ☐
 - Sort By: Station (dropdown)
 - Station Search: CBR (input field)
- Footer Section:**
 - Filter Options (Filter by WFO list, Primary list or Secondary List)
 - SHEF Display Options (Show SHEF Post or No Post)
 - Sort and Search Utilities (Sort by Station, Name or County; Search by Station ID)

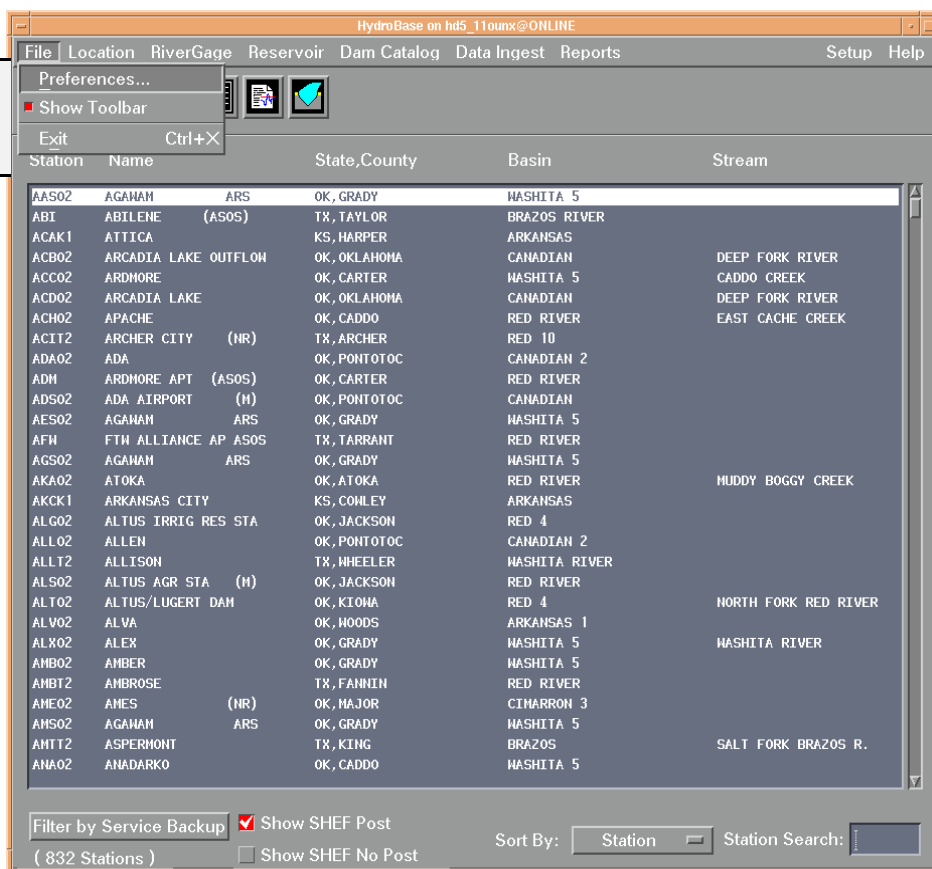
Notes:

The Quick Reference Tool Bar can be used for access to (in order from left to right): location information, contacts, river gage information, flood categories, impact statements and reservoir information (if appropriate) for a selected station. A station must first be selected prior to using the Tool Bar. If certain data and information are not available for a selected station, that Tool Bar icon will be greyed out.

Due to the large volume of data and information accessible by HydroBase, data can only be viewed and edited from one station at a time.

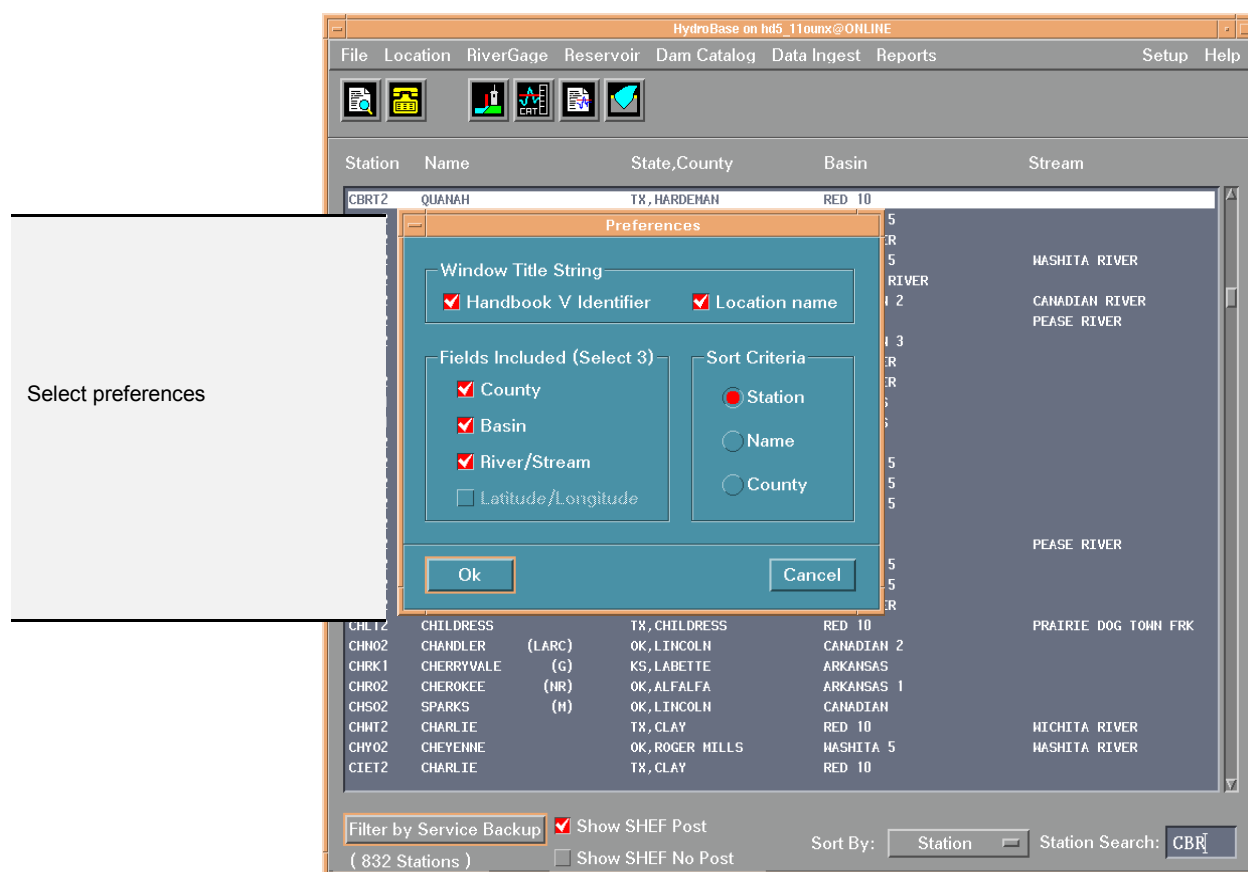
HydroBase Root Window (File selected from the Menu Bar) - Use this selection to define Root Window preferences, select/deselect **Quick Reference Tool Bar** and to exit from HydroBase.

Select Root Window preferences, select/deselect Quick Reference Tool Bar



Access this selection from the **Root Window** by *Clicking* on **File**.

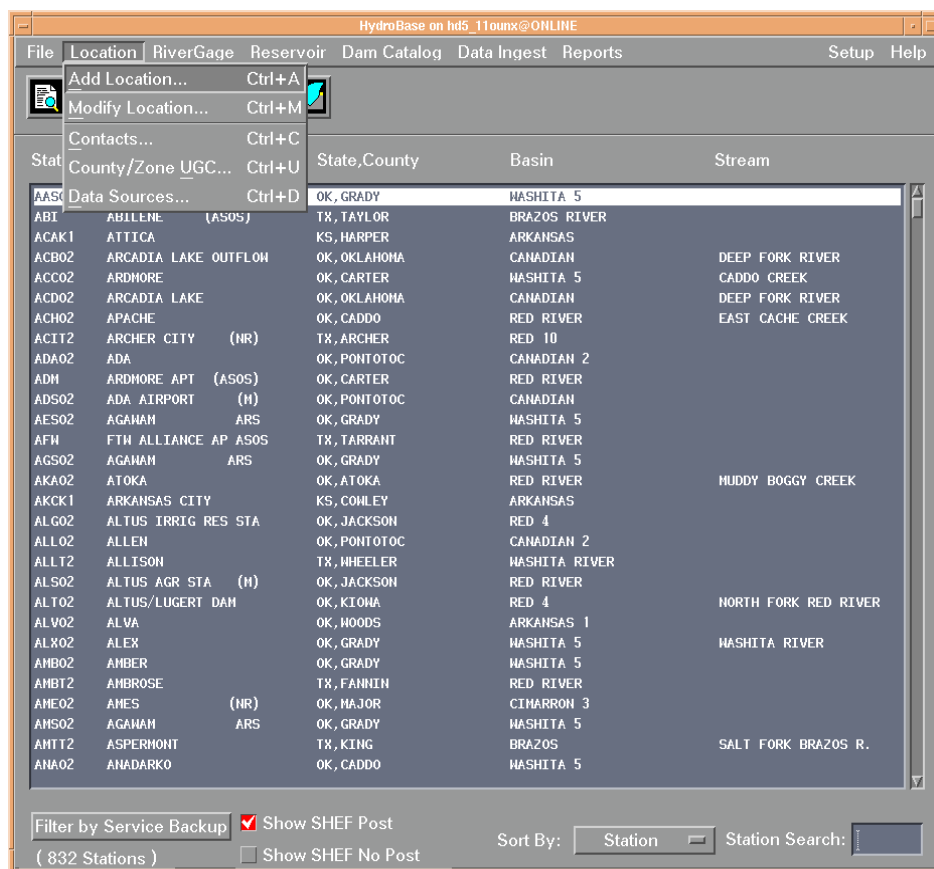
Preferences Window - Use this selection to customize the display features of the HydroBase windows.



Access this selection from the **Root Window** by *Clicking* on **File, Preferences.**

Notes: The Window Title String selection determines whether the screens viewed in HydroBase have the station Handbook V Identifier (CHB5 ID), the location name, both ID and identifier or neither displayed at the top of the window. Due to display width restrictions, a maximum of three data fields can be displayed in the main window.

HydroBase Root Window (Location selected from the Menu Bar) - Use this selection to add, review and edit location data for a selected station including contacts, universal generic code (UGC) and data sources information.



Access this selection from the **Root Window** by *Clicking on Location*.

Add Location Window - Use this selection to add a new location to the database. Shown are the Geophysical and Additional Info screens (both are used to add a new location).

Select Geophysical (this screen) or Additional Info (bottom screen)

Complete as required to add a new location to the data base.

Copy to New Location is not used for this application.

Remarks can be used to clarify gage location, for example.

Additional Info screen - complete as required to add a new location to the database.

Setup and Apply Cooperating Agencies - complete to define and associate additional agencies or offices with a station location.

Access this selection from the **Root Window** by *Clicking* on **Location, Add Location**.

Notes: Click OK to incorporate changes and close window, Click Apply to incorporate changes and keep the window open.

Modify Location Window - Use this selection to view and edit location data from the selected station.

Select Geophysical (screen shown) or Additional Info (same screen as shown for Add Location Window)

Copy to New Location allows saving the data selected to a new station ID without using the Add Location Window.

Modify Location - BLUO2 - BLUE

Page: **Geophysical** Copy to New Location

Geographic/Physical

Location: **BLUO2** ☐ Inactive ☐ Revise: **06/19/1995**

Name: **BLUE** Detail: **1** W

Basin: **RED 4** Network: **B**

Lat/Lon: **33 59 49 96 14 27** HSA: **OUN**

Elevation: **503.0** WFO: **OUN**

Station Num: **34-0863-8** RFC: **ABRFC**

County/State: **BRYAN, OK**

Remarks

US HWY 70 NR LT BANK ON DS SIDE OF BRIDGE OVER BLUE RIVER, 1 MI. W OF BLUE, OK AND 8 MI. E OF DURANT, OK
DURANT/BRYAN COUNTY CEMA IS BACKUP OBSERVER TO DCP

Station Characteristics (View-Only)

Station Type:

☒ Forecast Point ☒ Reservoir ☐ Snow ☐ Other

☐ River Data ☒ Precipitation ☒ Temp ☐ Undefined

Data Sources:

☒ Dcp ☒ Observer

☒ Telemetry

Ok Apply Cancel Delete

To delete a location, Click on Delete and respond to the confirmation prompt

Access this selection from the **Root Window** by Clicking on **Location, Modify Location**.

Notes: Click OK to incorporate changes and close window, Click Apply to incorporate changes and keep the window open.

Contacts Window - Use this selection to view and edit contact data and information from the selected station.

Select contact to view information (as shown below)

View and edit contact information

Click New to add a new record or Delete to delete a selected record

Access this selection from the **Root Window** by *Clicking* on **Location, Contacts**.

Notes: *Click* OK to incorporate changes and close window, *Click* Apply to incorporate changes and keep the window open. Select New to enter data. This will clear the display of elements. Modifying the elements and selecting Apply or OK will update the selected record - it will not create a new entry. Use New for a new entry.

County/Zone UGC Window - Use this selection to view and edit county and zone Universal Generic Code (UGC) information from the selected station.

Select Counties or Zones (available and selected information will be displayed below)

Use Add, Delete or Clear to modify the selected counties or zones for the selected station. Delete will delete the highlighted Selected county or zone, Clear will delete ALL Selected counties or zones.

Access this selection from the **Root Window** by *Clicking* on **Location, County/Zone UGC**.

Notes: *Click* OK to incorporate changes and close window, *Click* Apply to incorporate changes and keep the window open.
This information is used by the product formatter, RiverPro, when assembling UGCs for the product header.

Data Sources Window - Use this selection to view and edit data source information (DCP, Observer and Telemetry data source types) from the selected station.

View and edit information. Information such as observer home telephone number, SSN, source cost, and rate are normally optional and are often left blank.

The Observer Screen window displays the following information:

- Type:** Observer
- Observer Section:**
 - First Name: [Blank]
 - I/Last Name: L. E. Hibbard
 - Address: City Library, 606 South Harwell
 - City: BURKBURNETT
 - State: TX
 - Zip: 76354
 - DoS: 03/01/1979
 - Home: 817/569-5060
 - Work: 817/569-2991
 - SSN: [Blank]
 - Gender: ☐ M ☒ F ☐ I
- Administration Section:**
 - Comms: PHONE
 - Sponsor: S & E
 - Recip: WFO OUN
 - Report: BACKUP: ALSO, TOMMY THORNTON - POLICE 817-569-2231
 - Task No: [Blank]
 - Rate: 0.00
 - CD-404: [Blank]

Buttons at the bottom: Apply, Close, Delete.

Observer Screen

The DCP Screen window displays the following information:

- Type:** DCP
- General Section:**
 - Owner: USGS
 - GOES ID: CE2955E4
 - Reporting Time: 00:18:00
 - Reporting Frequency: 240
- Criteria Section:** [Empty list box]

Buttons at the bottom: Apply, Close, Delete.

DCP Screen

The Telemetry Screen window displays the following information:

- Type:** Telemetry
- General Section:**
 - Telemetry: ALERT
 - Owner: BLACKWELL
 - Payor: ARDMORE CD
 - Phone: [Blank]
 - Cost: [Blank]
 - Sensor Id: [Blank]
 - Reporting Frequency: [Blank]
- Criteria Section:** [Empty list box]

Buttons at the bottom: Apply, Close, Delete.

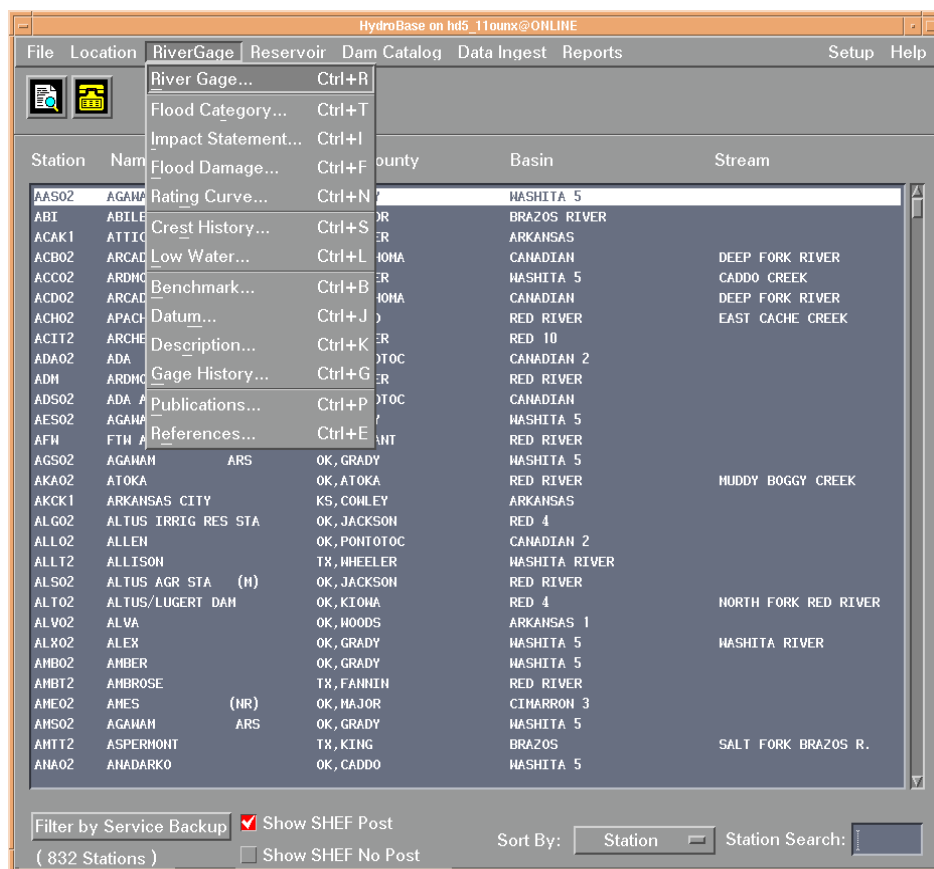
Telemetry Screen

Access this selection from the **Root Window** by *Clicking* on **Location, Data Sources**.

Notes:

- To delete a data source, *Click* on Delete and respond to the confirmation prompt.
- Click* OK to incorporate changes and close window, *Click* Apply to incorporate changes and keep the window open.

HydroBase Root Window (RiverGage selected from the Menu Bar) - Use this selection to view and edit river gage-related information and data from the selected station.



Access this selection from the **Root Window** by *Clicking* on **River Gage**.

River Gage Window - Use this selection to view and edit river gage information and data from the selected station. Shown are the Geophysical and Additional Info screens (both are used to view and modify river gage information and data).

Select Geophysical (this screen) or Additional Info (bottom screen)

View and modify geophysical information and data

THE FLOOD STAGE AND ACTION STAGE VALUES MUST BE PROVIDED AS THEY ARE IMPORTANT FOR BOTH HYDROVIEW AND RIVERPRO

A FORECAST POINT GROUP ASSIGNMENT MUST BE MADE FOR THE STATION TO BE CONSIDERED FOR RIVERPRO

Select physical element to be used in the HydroView Displays and in RiverPro for variables such as <ObsStg> and <SpecFcstStg>

Select checkbox to include data from latest forecast time series only

View and modify additional information and data

Access this selection from the **Root Window** by *Clicking* on **RiverGage, River Gage**.

Notes:

To delete a record, *Click* on Delete and respond to the confirmation prompt. *Click* OK to incorporate changes and close window, *Click* Apply to incorporate changes and keep the window open.

The Use Latest Forecast When Computing Maximum Forecast Value checkbox is point-specific. It was moved from the Setup/Riverpro General Parameters menu option.

Flood Category Window - Use this selection to view and edit flood category definitions for a selected station.

View and edit flood category stage and discharge definitions.

THIS INFORMATION IS OF PARTICULAR IMPORTANCE TO RIVERPRO

Flood Category - BLU02 - BLUE

Categories

	Stage	Discharge
Major:	36.0	44000
Moderate:	24.0	42700
Minor:	21.0	42400

Ok

Cancel

Delete

Access this selection from the **Root Window** by *Clicking* on **RiverGage, Flood Category**.

Notes: To delete a record, *Click* on Delete and respond to the confirmation prompt.

Impact Statement Window - Use this selection to view and edit impact statement definitions for a selected station.

Select the stage. The stage characteristics and associated impact statement to view and edit will be displayed below.

View and edit stage characteristics and impact statement. Impact statements are included for each incremental stage increase. Season definitions can be January - December however, seasonal impacts may be included if areas such as parks are more affected by lower stage levels at various times of the year.

Impact Statement - BLU02 - BLUE

Stage:	Begin:	End:	Tendency:
45.00	01/01	12/31	RISING
44.50	01/01	12/31	RISING
44.00	01/01	12/31	RISING
43.50	01/01	12/31	RISING
43.00	01/01	12/31	RISING
42.50	01/01	12/31	RISING

Characteristics

Stage: Begin (Seasonal):

Tendency: ☒ Rising ☐ Falling End (Seasonal):

Impact

VALLEY-WIDE FLOODING WILL EXTEND FROM NW TO SE BRYAN COUNTY, WHERE THE BLUE RIVER EMPTIES INTO THE RED RIVER. UPSTREAM IN SE JOHNSTON COUNTY, FLOODING WILL BEGIN MANY HOURS BEFORE THE CREST TIME AT THE GAGE NEAR BLUE. DOWNSTREAM NEAR WADE, FLOODING MAYLINGER FOR DAYS. ARMSTRONG WILL SEE LIFE-THREATENING FLOWS AT DEPTHS NEAR 5 FEET AND PROBABLE DESTRUCTION OF HOUSES AND BUSINESSES. HIGHWAYS CLOSED WILL INCLUDE: US 70 WEST OF BLUE (EAST OF DURANT); SH 48 NEAR ARMSTRONG; 70E NEAR WADE.

Ok Apply Cancel New Delete Print All Save to File

Click New to add a new stage and associated impact statement to the database.

Click Delete to delete stage/impact statement from the database.

Click Print All to make a hard copy of stage characteristics and impact statement for all stages.

Click Save to File to save the stage/impact statements for all stages to a separate file.

Access this selection from the **Root Window** by *Clicking* on **RiverGage, Impact Statement**.

Notes:

Click OK to incorporate changes and close window, Click Apply to incorporate changes and keep the window open.

Select New to enter data. This will clear the display of elements.

Modifying the elements and selecting Apply or OK will update the selected record - it will not create a new entry. Use New for a new entry.

The impact statements are included directly in the phrases generated by the product formatter, RiverPro.

Flood Damage Window - Use this selection to view and edit flood damage statements for a selected station.

Select the stage. The associated flood damage statement to view and edit will be displayed below.

View and edit flood damage impact statement. Impact statements are included for each incremental stage increase.

Click New to add a new stage and associated impact statement to the database. Click Delete to delete stage/impact statement from the database.

Access this selection from the **Root Window** by *Clicking* on **RiverGage, Flood Damage**.

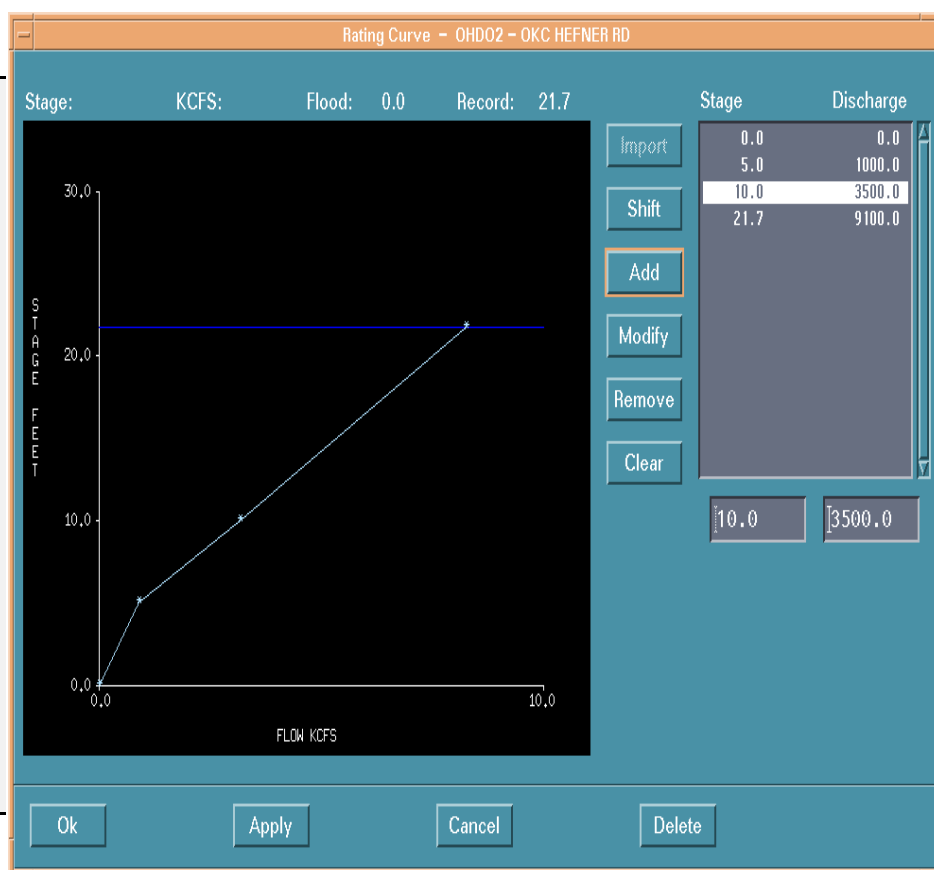
Notes: Click OK to incorporate changes and close window, Click Apply to incorporate changes and keep the window open. Select New to enter data. This will clear the display of elements. Modifying the elements and selecting Apply or OK will update the selected record - it will not create a new entry. Use New for a new entry. This information is not included in phrases generated by the product formatter, RiverPro, it is for internal use.

Rating Curve Window - Use this selection to view and edit the rating curve for a selected station.

The rating curve can be edited from the table at the right of the curve. Negative stage values can be entered.

Click within the graphical display area to display cross-hairs (values for stage and flow from the intersection of the cross-hairs are provided at the top of the display).

Blue horizontal line references the record stage and the red horizontal line references flood stage.



Deletes the rating curve from the database

Access this selection from the **Root Window** by *Clicking* on **RiverGage, Rating Curve**.

Notes: *Click* OK to incorporate changes and close window, *Click* Apply to incorporate changes and keep the window open.

Crest History Window - Use this selection to view and edit data and information for historical crests for a selected station.

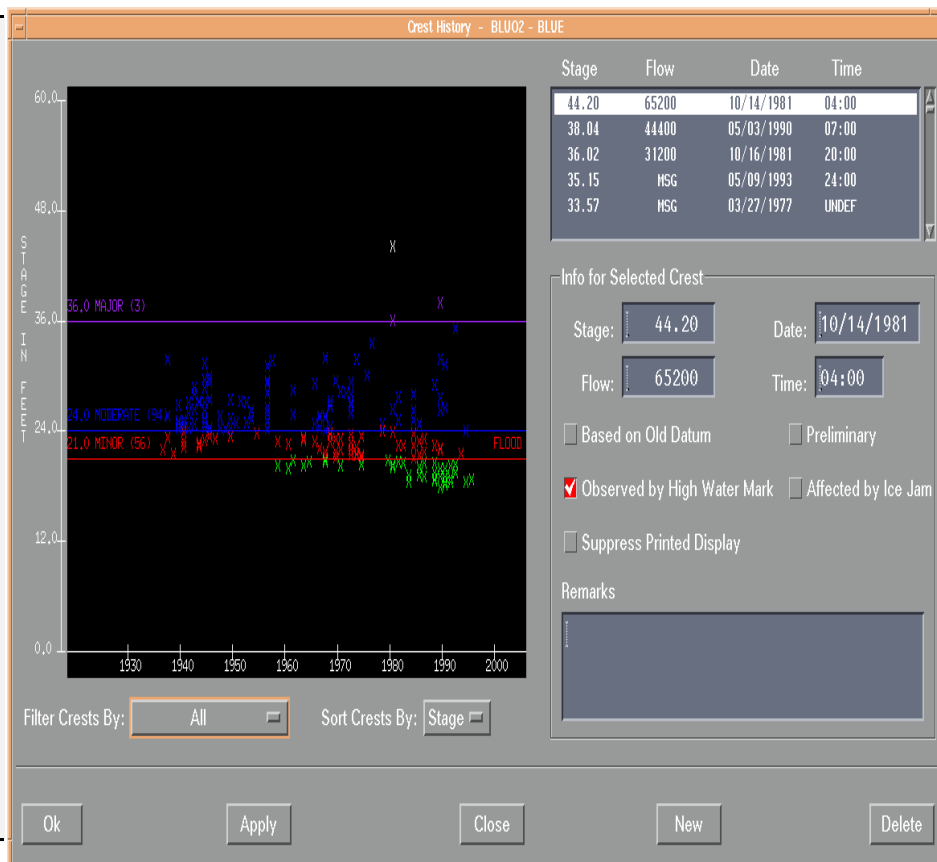
Historical crest information can be entered, edited or deleted using the tabular section of the window.

A stage highlighted in the tabular section will also be highlighted in the graphical section of the window.

Clicking on a data point in the graphical display will also highlight the stage in the tabular display.

Horizontal lines and data point colors on the graphical display indicate - major flood (purple), moderate flood (blue), minor flood (red) and action level (yellow).

Observation basis definitions - Old Datum (based on different input data), High Water (data from high water mark), Ice Jam (crest result of ice jam), Preliminary (crest not verified) and Suppress Printed Display (suppress data in Text Report E-19 crest history printout).



Filter options include All (all data points displayed), Above Action Stage (only data points above the action level are displayed), Below Action Stage (only data points below the action level are displayed).

Sort options include Stage, Date, and Flow.

Click New to add a new record or Delete to delete a selected record

Access this selection from the **Root Window** by Clicking on **RiverGage, Crest History**.

Notes:

Click OK to incorporate changes and close window, Click Apply to incorporate changes and keep the window open. Click Close to close the window (does not automatically incorporate changes).

Select New to enter data. This will clear the display of elements.

Modifying the elements and selecting Apply or OK will update the selected record - it will not create a new entry. Use New for a new entry.

This information is used by RiverPro to generate product phrases.

Low Water Window - Use this selection to view and edit data and information for historical low water occurrences for a selected station.

View and edit information.

The window lists historical low flow stages (feet) and associated discharge (cubic feet per second)

Low Water - ANDO2 - ANADARKO

Stage	Flow	Date
	123	09/14/1990
	0	08/01/1964

Information

Stage:

Flow:

Date:

123

09/14/1990

Notes:

NO FLOW AT TIMES IN MOST YEARS

Ok

Apply

Cancel

New

Delete

Click New to add a new record or Delete to delete a selected record

Access this selection from the **Root Window** by *Clicking* on **RiverGage, Low Water**.

Notes: Click OK to incorporate changes and close window, Click Apply to incorporate changes and keep the window open.
 Select New to enter data. This will clear the display of elements.
 Modifying the elements and selecting Apply or OK will update the selected record - it will not create a new entry. Use New for a new entry.

Benchmark Window - Use this selection to view and edit data and information for permanent survey benchmarks for a selected station.

Highlight a benchmark and edit below.

Number	Elevation
33XX	189.000

Information

Number: 33XX Elevation: 189.000

Description:
Mark on third pier of bridge crossing Highway 146
(this is an example only)

Ok Apply Cancel New Delete

Click New to add a new record or Delete to delete a selected record

Access this selection from the **Root Window** by *Clicking* on **RiverGage, Benchmark**.

Notes: Click OK to incorporate changes and close window, Click Apply to incorporate changes and keep the window open.
Select New to enter data. This will clear the display of elements.
Modifying the elements and selecting Apply or OK will update the selected record - it will not create a new entry. Use New for a new entry.

Datum Window - Use this selection to view and edit data and information for gage datum (elevation of gage zeros from mean sea level) for a selected station.

Highlight a datum entry and edit below.

Date refers to date when the initial datum was used.
Elevation is in feet MSL of the gage zero.

Date	Elevation
10/01/1988	995.000
11/09/1965	1000.000

Information

Date: 10/01/1988 Elevation: 995.000

Ok Apply Cancel New Delete

Click New to add a new record or Delete to delete a selected record

Access this selection from the **Root Window** by *Clicking* on **RiverGage, Datum**.

Notes: Click OK to incorporate changes and close window, Click Apply to incorporate changes and keep the window open.
Select New to enter data. This will clear the display of elements.
Modifying the elements and selecting Apply or OK will update the selected record - it will not create a new entry. Use New for a new entry.

Description Window - Use this selection to view and edit general descriptive forecast point information for a selected station.

View and edit descriptive information for the river gage.

Proximity describes the proximity of the station to the actual physical location of the forecast point (Above, At, Below, In, Near, Undefined).

Divert describes any known diversions near the gaging location.

Regulation describes control structures upstream of the gaging location which impact flow.

Topography describes the topography along the river reach.

Other descriptors are self-explanatory.

Access this selection from the **Root Window** by *Clicking* on **RiverGage, Description**.

Notes: To delete a record, *Click* on Delete and respond to the confirmation prompt. *Click* OK to incorporate changes and close the window.

Gage History Window - Use this selection to view and edit historical gage information for a selected station.

Select entry to view information (as shown below)

View and edit gage history information for selected entry.

Type	Owner	Begin	End
TRANSDUCER	USGS	10/02/1988	08/09/1989
MANOMETER	USGS	07/07/1978	09/30/1986
MANOMETER	USDA ARS	01/01/1976	07/07/1978
STAFF	USDA ARS	09/02/1961	01/01/1978
MANOMETER	USDA ARS	09/01/1961	01/01/1978
CREST-STG	USGS	10/03/1988	

Information

Type: TRANSDUCER Begin: 10/02/1988

Owner: USGS End: 08/09/1989

Maint: USGS

Location

EQUIPMENT EVALUATION TEST: PRESSURE
TRANSDUCER ATTACHED TO CAMPBELL CR10 DATA
LOGGER, CONNECTED TO SM192 STORAGE MODULE.

Ok
Apply
Cancel
New
Delete

Click New to add a new record or Delete to delete a selected record

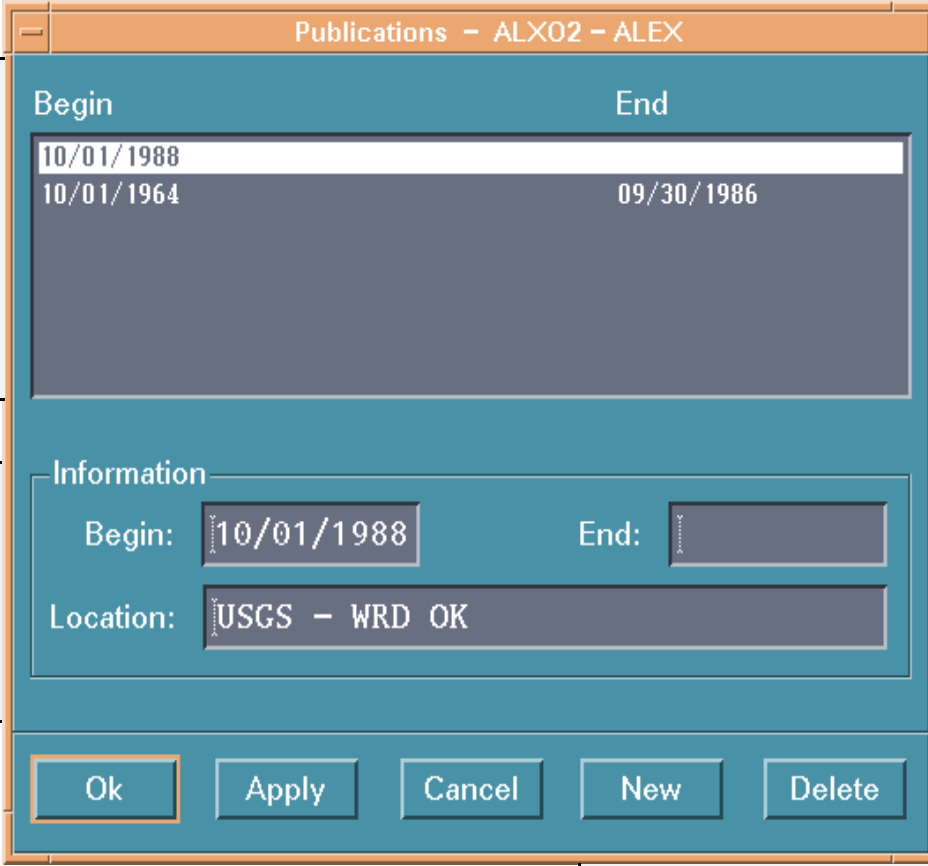
Access this selection from the **Root Window** by *Clicking* on **RiverGage, Gage History**.

Notes: *Click* OK to incorporate changes and close window, *Click* Apply to incorporate changes and keep the window open.
 Select New to enter data. This will clear the display of elements.
 Modifying the elements and selecting Apply or OK will update the selected record - it will not create a new entry. Use New for a new entry.

Publications Window - Use this selection to view and edit information about publications that contain data from the selected station.

Select a publications entry to view information (as shown below)

View and edit publications information for selected entry



Click New to add a new record or Delete to delete a selected record

Access this selection from the **Root Window** by *Clicking* on **RiverGage, Publications**.

Notes: Click OK to incorporate changes and close window, Click Apply to incorporate changes and keep the window open. Select New to enter data. This will clear the display of elements. Modifying the elements and selecting Apply or OK will update the selected record - it will not create a new entry. Use New for a new entry.

References Window - Use this selection to view and edit information about references which describe where data records from the selected station are kept.

Select reference to view
information (as shown below)

References - ALX02 - ALEX

Reference

USGS - WATER RESOURCES DATA FOR OKLAHOMA, ANNUAL THRU WY-1991

USGS - FORM 9-197, STATION DESCRIPTION, 2/21/90

USCE - OM 500-1-6, NATURAL DISASTER PROCEDURES UNDER PL 84-99, 11/91

NHS - HS FORM E-19, REPORT OF RIVER - GAGING STATION, 9/28/80

NHS - (HS FORM 531-5) REPORT OF RIVER - GAGING STATION, 9/23/76

USGS - WATER RESOURCES DATA FOR OKLAHOMA, ANNUAL THRU WY-1991

Ok Apply Cancel New Delete

Click New to add a new record or
Delete to delete a selected
record

Access this selection from the **Root Window** by *Clicking* on **RiverGage, References**.

Notes: Click OK to incorporate changes and close window, Click Apply to incorporate changes and keep the window open.
Select New to enter data. This will clear the display of elements.
Modifying the elements and selecting Apply or OK will update the selected record - it will not create a new entry. Use New for a new entry.

HydroBase Root Window (Reservoir selected from the Menu Bar) - Use this selection to view and edit reservoir-related information and data from the selected station.



Access this selection from the **Root Window** by *Clicking* on **Reservoir**.

Reservoir Window - Use this selection to view and edit reservoir information from the selected station. A station is a reservoir station primarily by virtue of filling out this window.

Select information to modify

The reservoir can be associated to a particular dam through Dam Catalog by *Clicking* on **Associate this Reservoir with a Dam in Dam Catalog**. By *Clicking* on this option, the screen shown below appears. Once an associated dam has been identified (the dam ID will be displayed in the window), Dam Catalog can be used to display information regarding the dam.

Reservoir - ALTO2 - ALTUS/LUGERT DAM

Associate this Reservoir with a Dam in Dam Catalog

Information

Name: LUGERT/ALTUS LAKE Uses: ☒ Flood Control
☐ Hydroelectric
Impound Date: 01/01/1960 ☐ Low Flow Augmentation
Gates: 8 ☐ Navigation
Type: CONCR_EART ☒ Recreation
Owner: USBR ☒ Water Supply

Elevations

Max Surge: 1564.0
Top: 1571.0
Sill: 1547.0
Reservoir: 0.0

Pools

Flood: 1562.0
Spillway: 1559.0
Conservation: 1559.0
Dead: 1517.5

Ok Cancel Delete

Search for an associated dam within a defined area or by name. When using a name search, type in name in ALL CAPS.

Note: There is no link between the reservoir information and Dam Catalog. The associations must be established by the designated WFO HydroBase data base manager through **Reservoir**.

Associate Reservoir - ALTO2 - ALTUS/LUGERT DAM

Search for Dams

☒ Perform an Area Search (use a square box with a sidelength of): 0.5 degrees
☐ Perform a Name Search: ALTUS/LUGERT DAM LUGERT/ALTUS LAKE

Dam Id	Lat	Lon	State	Name(s)
OK02500	34 53 00	99 18 00	OK	ALTUS / ALTUS RES, LAKE ALTUS
OK02901	34 52 00	99 18 00	OK	ALTUS AUXILIARY DIKE / ALTUS RES, LAKE ALTUS
OK02902	34 54 00	99 16 00	OK	ALTUS EAST DIKE / ALTUS RES, LAKE ALTUS
OK02903	34 53 00	99 17 00	OK	ALTUS LUGERT DIKE / ALTUS RES, LAKE ALTUS
OK02904	34 53 00	99 18 00	OK	ALTUS NORTH DIKE / ALTUS RES, LAKE ALTUS
OK21226	34 39 18	99 19 00	OK	ALTUS RESERVOIR /
OK02905	34 53 00	99 18 00	OK	ALTUS SOUTH DIKE / ALTUS RES, LAKE ALTUS
OK21306	35 08 18	99 17 12	OK	CELSOR, J.L. /
OK21549	34 48 12	99 32 06	OK	CHAPMAN, A.B. GSS NO.2 /
OK12414	35 05 35	99 21 30	OK	GOODREY, VERNIA H. /
OK11027	35 01 54	99 06 30	OK	HUNTER /
OK20500	34 44 06	99 10 42	OK	MOUNTAIN PARK WEST DIKE / TOM STEED RES.
OK21152	34 57 36	99 20 42	OK	OKLAHOMA STATE OF REFORMATORY /
OK20718	34 44 48	99 16 36	OK	OKNONAME 031008 /
OK21227	34 46 48	99 11 24	OK	OKNONAME 065001 /
OK02202	34 44 30	99 11 24	OK	OKNONAME 065002 /

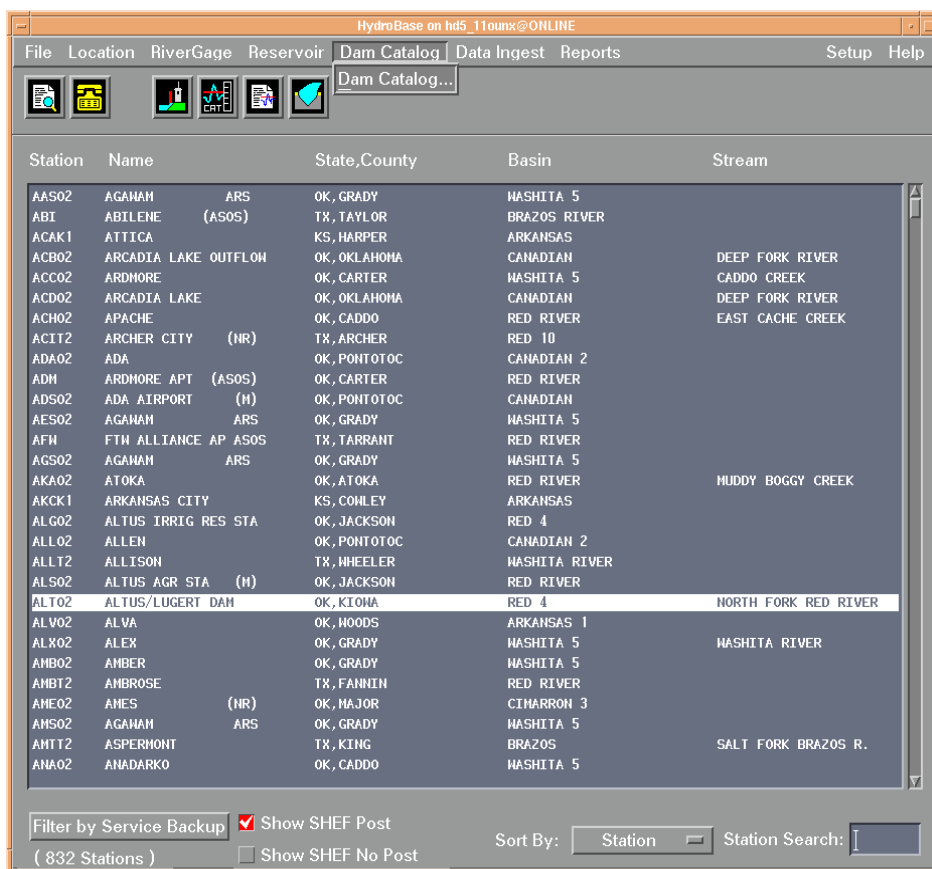
(33 Dams)

Ok Clear Cancel

Access the top screen from the **Root Window** by *Clicking* on **Reservoir, Reservoir**.

Notes: To delete a record, *Click* on **Delete** and respond to the confirmation prompt.

HydroBase Root Window (Dam Catalog selected from the Menu Bar) - Use this selection to access the Dam Catalog application.



Access this selection from the **Root Window** by *Clicking on Dam Catalog*.

Dam Catalog Window - Use this selection to view and edit information on dams within the region of interest. The initial dam catalog window (damcat) with a filtered list of dams is shown below.

List of dams using search filter below. Use View to view dam information, Edit to make changes to the dam information, Add to complete a blank template and Delete to delete a selected dam from the data base.

Use Search/Filter Criteria to select dam(s) to view, edit or delete. Information which can be viewed or edited includes General Information, Physical Dimensions, Reservoir Information, Agency Information and Dam Break Information (dam break model output).

Select the required search criteria, then *Click* Apply Filter. The dam(s) which meet the criteria will be displayed above.

Use Trim Database to selectively delete dams from the database (state-by-state basis).

damcat

List of Dams which meet the criteria below

Dam ID	Name	River	Town	State	County	Lat	Long	WFO	RFC	Hazard
OK10301	ROBERT S. KERR LOCK	ARKANSAS RIVER	REDLAND	OK	SEQUOYAH	35.35	94.78	TSA	TUR	H
OK10304	WEBBERS FALLS LOCK	ARKANSAS RIVER	WEBBERS FALLS	OK	HUSKOGEE	35.55	95.17	TSA	TUR	H
OK10305	W.D. HAYO LOCK AND DA	ARKANSAS RIVER	ARKHOMA	OK	LE FLORE	35.31	94.56	TSA	TUR	H
OK10309	KEYSTONE LAKE	ARKANSAS RIVER	SAND SPRINGS	OK	TULSA	36.15	96.25	TSA	TUR	H
OK20509	KAW	ARKANSAS RIVER	PONCA CITY	OK	KAY	36.70	96.92	OUN	TUR	H
OK21620	TULSA RIVER PARKS	ARKANSAS RIVER		OK	TULSA	36.12	96.99	TSA	TUR	L
OK22217	HILBERT KLINGER	ARKANSAS RIVER		OK	OSAGE	0.00	0.00	TSA	TUR	L

View Edit Add Delete Unselect All Number of Dams: 7

Search/Filter Criteria

ID: Name:

Downstream Town:

Contained within the area

Latitude: to

Longitude: to

County: ADAIR ALFALFA ALLEN State: OHIO OKLAHOMA OREGON River: AQUILLA CREEK ARBECA CREEK ARKANSAS RIVER

Hazard Level: HIGH LOW SIGNIFICANT RFC: ANR ATR CIN WFO: ABQ: Albuquerque, NM ABR: Aberdeen, SD AFC: Anchorage, AK

Apply Filter ☒ Match ALL Criteria ☐ Match ANY Criteria Clear Filters

Sort Criteria

Sort list by the following field: ☒ ID ☐ Name ☐ River ☐ State/County

Exit Trim Database Help

Access this selection from the **Root Window** by *Clicking* on **Dam Catalog**, then on **OK** in the **Running Dam Catalog Dialogue Box**.

A list of **Dam Catalog Field Definitions** (used in this window and in dam information windows on the following page) is provided in Appendix C.

Notes: *Click* on the Help button for additional information.

Dam Catalog Window (Information Examples) - Displayed below are examples of data and information available through Dam Catalog when selecting View or Edit.

Dam Information
 General Information | Physical Dimensions | Reservoir Information | Agency Information | Dam Break Information
 ID: OK22217 Name: HILBERT KLINGER

Name: HILBERT KLINGER
 Other Name:
 Latitude: 0.00 Longitude: 0.00 Section, Township, Range: S30 T25N R10E1M
 River: ARKANSAS RIVER State: OKLAHOMA
 Non-federal dam located on federal property: ☐ Yes ☒ No County: OSAGE
 Owner Type: PRIVATE County Fips: 113
 Owner: HILBERT KLINGER
 Type: **STONE** Purpose: **RECREATION**
 TIMBER CRIB
 ARCH
 Year Completed: 1966
 Emergency Action Plan: NO Potential Hazard Downstream: LOW
 Phase I Inspection: ☐ Yes ☒ No Last Inspection Date:
 Previous Dam Next Dam Save Dam Delete Dam Clear Page Close Help

General Information

Dam Information
 General Information | Physical Dimensions | Reservoir Information | Agency Information | Dam Break Information
 ID: OK22217 Name: HILBERT KLINGER

General Information
 Length (feet): 0 Structural Height (feet): 40
 Height (feet): 40 Hydraulic Height (feet): 40
 Volume (cubic yards): 7300000 HD Height (feet): 40
 Spillway Information
 Spillway Type: Spillway Width (feet): 0
 Lock Information
 Number of Locks: Locks Length (feet): 0 Locks Width (feet): 0
 Previous Dam Next Dam Save Dam Delete Dam Clear Page Close Help

Physical Dimensions

Dam Information
 General Information | Physical Dimensions | Reservoir Information | Agency Information | Dam Break Information
 ID: OK22217 Name: HILBERT KLINGER

Maximum Storage (acre-feet): 530 Surface Area (acres): 35
 Maximum Discharge (cu ft / sec): 0 Drainage Area (sq miles): 0
 Normal Storage (acre-feet): 350
 Previous Dam Next Dam Save Dam Delete Dam Clear Page Close Help

Reservoir Information

Dam Information
 General Information | Physical Dimensions | Reservoir Information | Agency Information | Dam Break Information
 ID: OK10304 Name: WEBB'S FALLS LOCK AND DAM 16

Weather Forecast Office: TSA: Tulsa, OK
 River Forecast Center: TUR
 Primary Source ID: 00510
 Primary Source: CE Date: 12-07-1993
 State Regulatory: OWRB
 Supplemental Federal Source: US ARMY CORPS OF ENGINEERS Date: 12-07-1993
 Federal Agency Funding: US ARMY US AIR FORCE
 Federal Agency Inspection: US ARMY US AIR FORCE
 Federal Agency Construct: US ARMY US AIR FORCE
 Federal Agency Design: US ARMY US AIR FORCE
 Federal Agency Regulatory: US ARMY US AIR FORCE
 Federal Agency Operation: US ARMY US AIR FORCE
 Federal Agency Owner: US ARMY US AIR FORCE
 Federal Agency Other: US ARMY US AIR FORCE
 Previous Dam Next Dam Save Dam Delete Dam Clear Page Close Help

Agency Information

Access these selections from the **Root Window** by *Clicking* on **Dam Catalog**, then, after selecting dams, on **View** or **Edit**.

Notes:

Click on the Help button for additional information.

The General Information screen will always be displayed first; for other selections, *Click* the appropriate button across the top of the screen.

Dam Catalog Window (Dam Break Information Example) - Displayed below is an example of dam break forecast data and information available through Dam Break.

Downstream information

Dam break forecast information, based on model output.

Click on View Another Forecast to see model output results from different model runs or different models, if available. When using View Another Forecast, the dialogue box shown at the right will appear and other model options can be selected.

Dam Information

General Information Physical Dimensions Reservoir Information Agency Information **Dam Break Information**

ID: OK10304 Name: WEBBERS FALLS LOCK AND DAM 16

Downstream Point Information

Name: WEBBERS FALLS Channel Slope: 6.00

Distance from Dam (miles): 5.00 Invert Elevation (feet):

Viewing Forecast 1 of 1

AT DAM LOCATION:

Peak Flow / Time: (cfs) / (minutes) 1978195.00 69.10 Estimated Breach Width: (feet) 336.00

Peak Depth / Time: (feet) / (minutes) 0.28 0.00 Estimated Fail Time: (minutes) 16.80

AT DOWNSTREAM LOCATION:

Peak Flow / Time: (cfs) / (minutes) 1199957.00 0.00 Travel Time (minutes) from Dam to City/Town:

Peak Depth / Time: (feet) / (minutes) 54.87 0.75

Flood Depth / Time: (feet) / (minutes)

MODEL RUN INFORMATION:

Forecast Basis / Time: (MM-DD-YYYY) 11-15-1997 10-15-1997 Description: Summer 1997

Model Run Type / Time: (type) / (MM-DD-YYYY) SIMPLE DAMBREAK 12-15-1997

Clear Forecast Delete Forecast Save Forecast View Another Forecast

Selection List

SIMPLE DAMBREAK

Selection: SMPDBK

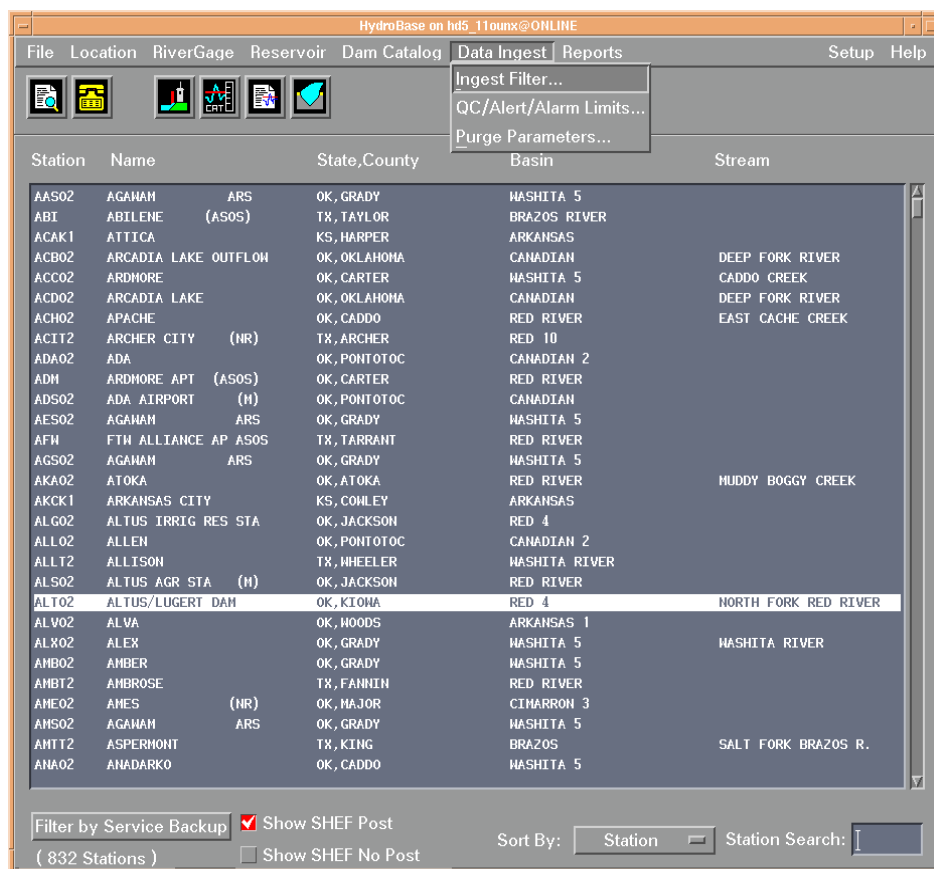
OK Clear Cancel Help

Previous Dam Next Dam Save Dam Delete Dam Clear Page Close Help

Access this selection from the **Root Window** by *Clicking* on **Dam Catalog**, then, after selecting dams, *Clicking* on **View** or **Edit**, then *Clicking* on **Dam Break Information**.

Notes: Click on the Help button for additional information.
 Simple Dambreak is set as the default model for dam break forecasts.

HydroBase Root Window (Data Ingest selected from the Menu Bar) - Use this selection to view and edit ingest filter, QC/alert/alarm limits, and purge parameters (parameters that control data flows into and data storage in HydroBase).



Notes: The use of the windows presented in the Data Ingest pull-down menu is station-independent. (A station does not have to be selected prior to selecting a window; however, some windows require the selection of a station before viewing or editing of data and information.)

Ingest Filter Window - Use this selection to view and edit ingest filter information (controls the flow of data into HydroBase).

Select station location and physical element to view and edit (as shown below).

Use Filter Parameters to filter the displayed list by location, physical element, service type and switches (master, OFS or Stage II).

View and edit data ingest filter information.

Data Ingest Filter

Ingest Filter Contents for Locations

Location	PE	Dur	TypeSrc	Ext	Rank	Master	OFS	Stg2
12345	AD	0	CF	D	1	T	F	F
1234567	AD	0	CF	D	1	T	F	F
ACD02	HP	0	RG	Z	1	T	F	F
ACD02	PC	0	RG	Z	1	T	F	T
ACD02	PN	0	RG	Z	1	T	F	T
ACD02	PP	1006	FM	Z	1	T	F	T
ACD02	PP	1006	FZ	Z	1	T	F	T
ACD02	PP	2001	FZ	Z	1	T	F	T
ACD02	PP	5004	RG	Z	1	T	F	T
ACD02	PP	5004	RZ	Z	1	T	F	T
ACH02	PP	1001	RZ	Z	1	T	F	T
ACI12	AD	5000	RZ	Z	1	T	F	F
ACI12	HP	0	RZ	Z	1	T	F	F
ACI12	PP	2001	RZ	Z	1	T	F	T
ACI12	PP	5004	RZ	Z	1	T	F	T

Set Switches ☐ ☐ ☐

Filter Parameters

Filter By: ☐ Location ☐ TypeSrc
☐ PhysElem ☐ Switches

Location:

PhysElem:
 AF Sfc Frost Intensity
 AG Percent Green Veg
 AH Sfc Dew Intensity
 AI Crit Temp Time 25 DF

TypeSrc:

Switches: ☐ Master ☐ OFS ☐ Stg2

Selected Item

Location:

Duration:

TypeSource:

Extremum:

Physical Element:
 PP Precip Increment
 PR Precip Rate
 PT Precip Type
 QA Adjusted Discharge
 QB Runoff Depth
 QC Runoff Volume

TypeSource Rank:

☒ Master Switch
☐ OFS Input Switch
☒ Stage2 Input Switch

Ok Apply Cancel New Delete

Click New to add a new record or Delete to delete a selected record.

Access this selection from the **Root Window** by *Clicking* on **Data Ingest, Ingest Filter**.

Notes:

Click OK to incorporate changes and close window, *Click* Apply to incorporate changes and keep the window open.

Select New to enter data. This will clear the display of elements.

Modifying the elements and selecting Apply or OK will update the selected record - it will not create a new entry. Use New for a new entry.

Entries are automatically added to the data ingest information by the SHEF decoder as new data sets are processed by the WHFS.

Quality Control and Alert/Alarm Limits Window - Use this selection to view and edit quality control parameters for data flowing into HydroBase.

Select the list to display (default limits or location limits).

Select station location and/or physical element to view and edit (as shown below).

Use Filter Parameters to filter the displayed list by location or physical element.

View and edit Limits information for the selected item.

Quality Control and Alert/Alarm Limits

Limits

List: Filter By: ☐ Location ☐ PhysElem

Notes:

- 1) Changes to non-ROC limits take effect when SHEF decoder restarted.
- 2) Individual check is not performed if the limit value is not defined.
- 3) If limits defined for location, default limits not considered even if location limits are undefined.

Location	PE	Dur	Start	End	Gross Min	Gross Max	Reasonable Min	Reasonable Max	Rate Of Change	Alert Limit	Alert ROC	Alarm Limit	Alarm ROC
PP	1006	01/01	12/31		0.0	40.0							
PP	1008	01/01	12/31		0.0	40.0							
PP	1012	01/01	12/31		0.0	40.0							
PP	1018	01/01	12/31		0.0	50.0							
PP	2001	01/01	12/31		0.0	50.0							
PP	2007	01/01	12/31		0.0	200.0							
PP	3001	01/01	12/31		0.0	300.0							

Limits For Selected Item

Location:

Duration:

Start MM/DD:

End MM/DD:

Physical Element:

- PP Precip Increment
- PR Precip Rate
- PT Precip Type
- QA Adjusted Discharge
- QB Runoff Depth
- QC Runoff Volume
- QD Canal Divers. Dschrg
- QE Flow Diverted
- QF Discharge Velocity
- QG Generation Discharge
- QI Inflow Discharge
- QL Discharge Rule Curve

Quality Control Limits:

Gross Range:

Reasonable Range:

Rate Of Change (ROC): Units/Hour

Alert/Alarm Limits:

Alert: Alarm:

Value:

ROC:

Click New to add a new record or Delete to delete a selected record.

Access this selection from the **Root Window** by *Clicking* on **Data Ingest, QC/Alert/Alarm Limits**.

Notes:

- Click* OK to incorporate changes and close window, *Click* Apply to incorporate changes and keep the window open.
- Select New to enter data. This will clear the display of elements.
- Modifying the elements and selecting Apply or OK will update the selected record - it will not create a new entry. Use New for a new entry.
- When the actual range check is performed, a location-specific range is used if it exists for the location/physical element/duration combination; otherwise, the default range for the physical element/duration is used.

Purge Parameters Window - Use this selection to view and edit parameters controlling the storage requirements for observed and forecast data and products.

Select observed and forecast data table to view and edit Days/Hours to Keep (edit hours as shown below, number of days are calculated).

Select product ID to view and edit Versions to Keep (as shown below).

Data Purge Parameters

Observed and Forecast Data Purge Parameters

Table Name	Days/Hours to Keep	Time Field Name
agricultural	15/ 0 (360 hrs)	obstine
curprecip	3/12 (84 hrs)	obstine
discharge	15/ 0 (360 hrs)	obstine
dpadapt	1/ 0 (24 hrs)	obstine
evaporation	15/ 0 (360 hrs)	obstine
ground	15/ 0 (360 hrs)	obstine

curprecip 84

Update

Product Purge Parameters

Product Id	Versions to Keep	Latest Product Time	Posting Time
DDCPNSDDC	3	1998-10-26 16:18:58	1998-10-26 16:20:58
DDCQPSDDC	3	1998-10-26 10:05:30	1998-10-26 10:20:30
DDCRR3DDC	5	1998-10-26 15:36:33	1998-10-26 15:37:33
DDCRR6DDC	0	1998-08-25 21:45:00	1998-08-25 21:47:28
DDCRR7DDC	3	1998-10-26 18:00:50	1998-10-26 18:03:50

DDCPNSDDC 3

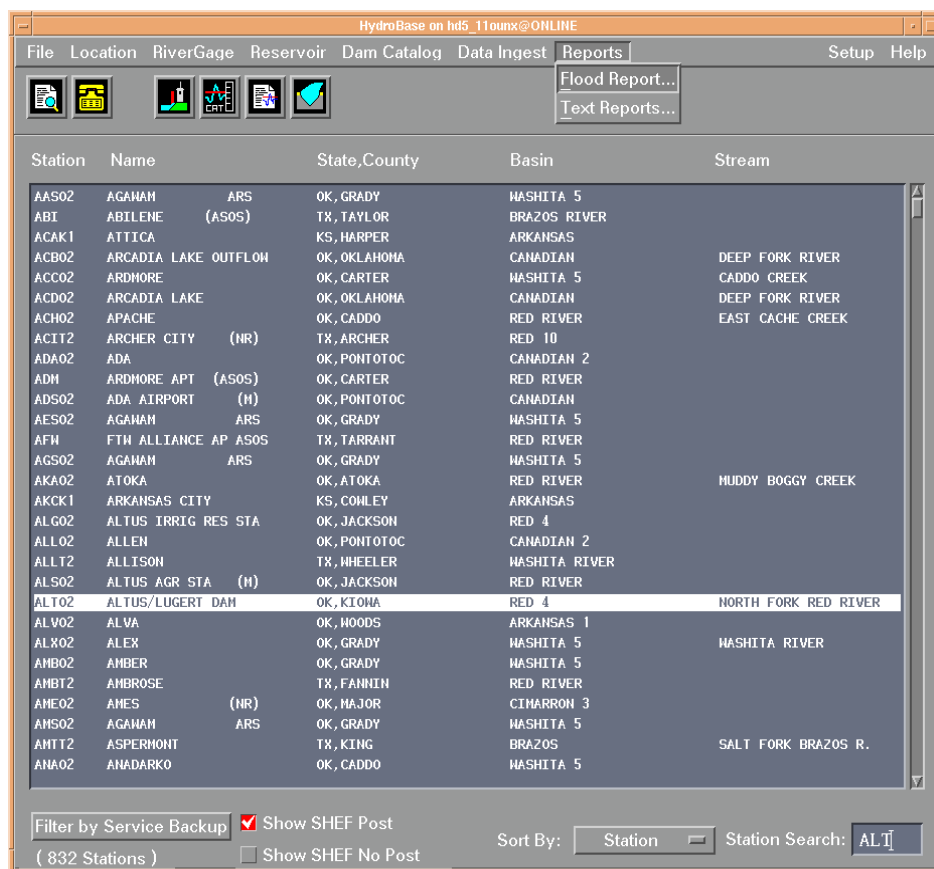
Add Update Delete

Ok

Access this selection from the **Root Window** by *Clicking* on **Data Ingest, Purge Parameters**.

Notes: Use Add to insert new Purge Parameter data and information, use Update to apply any changes and use Delete to delete the highlighted records from the database.

HydroBase Root Window (Reports selected from the Menu Bar) - Use this selection to view flood and text reports in the database.



Access this selection from the **Root Window** by *Clicking on Reports*.

Notes: Text reports can be saved or printed (see Text Reports Window).

Flood Report Window - Use this selection to view flood hydrograph information at those locations that experienced flooding during the past twelve months .

Select reporting period -
year-to-date, month-to-date,
the last twelve months, or
any one month in the last
twelve months.

Locations with flooding will be displayed in the list. *Click* on a location to display the hydrograph. Use cross-hairs to display stage information from the hydrograph.

Significant times are relative to flood threshold and maximum stage.

Flood Report

Reporting Period: **Month to Date** Location: **SASO2** Stage: **938.25 at 12/18 06:00 Z**

Location		Crest	Flood Stg
ELECTRA	ELT12	27.49	24.0
FARRIS	FRS02	43.00	43.0
GUTHRIE	GTR02	32.07	13.0
HEADRICK	HEA02	633.00	12.0
HARRAH	HRH02	1411.00	14.0
SASAKHA	SASO2	976.00	26.0
SEILING	SEI02	11.90	11.0
		11.30	11.0
		11.30	11.0
		26.29	11.0
SEWARD	SND02	27.89	25.0
		27.89	25.0
		28.76	25.0
UMGER	UNG02	41.66	34.0
		41.66	34.0
		41.66	34.0
		41.66	34.0
		41.66	34.0
		41.66	34.0

Save Events to File... Delete Event

Details for Selected Event

AboveFS:

Crest: **18 Dec 2000 04:45 Z**

BelowFS: **18 Dec 2000 08:41 Z**

976.00	Mon 12/18/2000	04:45
970.00	Mon 12/18/2000	05:00
963.00	Mon 12/18/2000	05:15
956.00	Mon 12/18/2000	05:30
950.00	Mon 12/18/2000	05:45
939.00	Mon 12/18/2000	06:00
6.71	Mon 12/18/2000	08:45

Close Compute Latest Data

Select **Save Events to File** to make a copy of the event records to a separate disk file.

Select Delete Event to delete a selected record.

Select Refresh Data to update flood sequence for the selected location.

Access this selection from the **Root Window** by *Clicking* on **Reports, Flood Report**.

Notes: Data and information are available for the number of months retained in the *floodts* table as defined in the Purge Parameters Window (see page 5-39)..

Text Reports Window - Use this selection to view E-19 reports, cooperative observer reports, a sorted station list, a station classification list, and a service backup list.

E-19 Report - ALTUS/LUGERT DAM

Report: E-19 Page: Cover

NWS FORM E-19 (COVER)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

REPORT ON RIVER GAGE STATION

REVISED, PRINTED DATES: 11/03/1992, 12/20/2000

LOCATION: ALTUS/LUGERT DAM
STREAM: NORTH FORK RED RIVER
BASIN: RED 4 HSA: OUN

REFERENCES:
REFERENCE 1
REFERENCE 2

Close Print Save

E-19

Sorted Station List Report

Report: Sorted Station List Sort By: Location Id

12/20/2000 LIST OF LOCATIONS SORTED BY

LID	LOCATION	COUNTY	BASIN	WFO
AAS02	AGAWAM	ARS	GRADY	WASHITA 5
AB1	ABILENE (ASOS)	TAYLOR	BRAZOS RIVER	FWD
ACAK1	ATITICA	GARPER	ARKANSAS	ICT
ACB02	ARCADIA LAKE OUTFLOW	OKLAHOMA	CANADIAN	OUN
ACG02	ARDMORE	CARTER	WASHITA 5	OUN
ACH02	ARGADIA LAKE	OKLAHOMA	CANADIAN	OUN
ACH02	APACHE	CADDO	RED RIVER	OUN
ACT12	ARCHER CITY (NR)	ARCHER	RED 10	OUN
ADA02	ADA	PONTOTOC	CANADIAN 2	OUN
ADM	ARDMORE APT (ASOS)	CARTER	RED RIVER	OUN
ADS02	ADA AIRPORT (H)	PONTOTOC	CANADIAN	OUN
AFS02	AGAWAM	ARS	GRADY	WASHITA 5
AFW	FTW ALLIANCE AP	ASOS TARRANT	RED RIVER	OUN
AGS02	AGAWAM	ARS	GRADY	WASHITA 5
AKA02	ATOKA	ATOKA	RED RIVER	OUN
ARKK1	ARKANSAS CITY	COMLEY	ARKANSAS	ICT
ALG02	ALTUS IRRIG RES STA	JACKSON	RED 4	OUN
ALL02	ALLIEN	PONTOTOC	CANADIAN 2	OUN
ALLT2	ALLISON	WHEELER	WASHITA RIVER	AMA
ALV02	ALTUS AGR STA (H)	JACKSON	RED RIVER	OUN
ALV02	ALTUS/LUGERT DAM	KIOWA	RED 4	OUN
ALV02	ALVA	WOODS	ARKANSAS 1	OUN
ALX02	ALEX	GRADY	WASHITA 5	OUN

Close Print Save

Sorted Station List

E-19A (Summary) Report - ALTUS/LUGERT DAM

Report: E-19A (Summary)

NWS FORM E-19A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

REPORT ON RIVER GAGE STATION

SITE

LID: ALT02 PROXIMITY: AT
NAME: ALTUS/LUGERT DAM
STREAM: NORTH FORK RED RIVER
COUNTY/STATE: KIOWA, OK BASIN: RED 4

DRAINAGE: 2515.00 FLOOD STAGE: 1559.00 STATION NO: 34-1004-7
RIVER MILE: 73.50 ACTION STAGE: 1555.00 USGS NO: 07302500
ZERO DATUM: 1466.000 BANKFULL STAGE: 0.00 NWS ID: C16542A
CHECKRAT: 0.000 NORMAL POOL: 1559.00 RFC: ABRFC
LATITUDE: 34 53 08 TIDES EFFECTS: None HSA: OUN
LONGITUDE: 99 17 43 FLOODGATS: MAJOR: 0.00
MODERATE: 0.00
MINOR: 0.00

PERIOD OF RECORD: 12/43-9/50, 10/50-

Observer: Bureau of Reclamation
Attn: Bill Hand SERVICE DATE: 06/01/1971 SPONSOR: LOCAL
Altus Dam CD-WAS RATE: 5 0.00
Route 1, Box 34 HOME PHONE:

Close Print Save

E-19A (Summary)

Station Class Report

Report: Station Class

12/20/2000 STATION CLASS REPORT Page 1

LID	STATION TYPE	DCP	OBSERVER	TELEMETRY DEVICE
AAS02	FD			MESONET
AB1	PTO	Yes	Yes	ASOS
ACAK1	D	Yes	Yes	
ACB02	D	Yes	Yes	
ACG02	D	Yes	Yes	
ACH02	P	Yes	Yes	ALERT
ACT12	DPSTO	Yes	Yes	NONE
ADA02	PSTO	Yes	Yes	NONE
ADM	PTO	Yes	Yes	ASOS
ADS02	PTO	Yes	Yes	MESONET
AFS02	U			MESONET
AFW	PTO	Yes	Yes	ASOS
AGS02	U			MESONET
AKA02	U			
ARKK1	RPSTO	Yes	Yes	NONE
ALG02	DPSTO	Yes	Yes	NONE
ALL02	PSTO	Yes	Yes	NONE
ALLT2	P			NONE
ALV02	DPSTO	Yes	Yes	MESONET
ALV02	RPSTO	Yes	Yes	NONE
ALX02	TP	Yes	Yes	NONE
ALH02	PSTO	Yes	Yes	NONE

Close Print Save

Station Classification

B-44A (Cooperative) Report - ALTUS/LUGERT DAM

Report: B-44A (Cooperative)

NWS FORM B-44A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

UNOFFICIAL COOPERATIVE STATION REPORT

IDENTIFICATION SECTION

Station Name: ALTUS/LUGERT DAM LID: ALT02
State: OK County: KIOWA
Latitude: 34 53 08 Elevation: 1525.00
Longitude: 99 17 43 Hydrologic Unit No: 11120303
Station Begin Date: 08/01/1945
River Basin: RED 4

OBSERVER SECTION

Observer: Bureau of Reclamation DOS: 06/01/1971 Gender: M
Address: Attn: Bill Hand Home Phone:
Altus Dam Office Phone: 405/563-2435
Route 1, Box 34 Recipient: WFO OUN
LONG MILE OK 73655 Comm: PHONE

Duties:

STATION MANAGEMENT SECTION

HSA: OUN WFO: OUN RFC: ABRFC

Close Print Save

B-44A (Cooperative)

Service Backup Report

Report: Service Backup Sort By: Station

12/20/2000 LIST OF LOCATIONS SORTED BY STATION ID Page 1

STATION ID	ST. COUNTY	WFO	PRIMARY BACKUP	SECONDARY BACKUP
AAS02	OK, GRADY	OUN	AMA	XXX
AB1	TX, TAYLOR	FWD	OUN	DOC
ACAK1	KS, HARPER	ICT	XXX	XXX
ACB02	OK, OKLAHOMA	OUN	XXX	XXX
ACG02	OK, CARTER	OUN	XXX	XXX
ACH02	OK, CADDO	OUN	XXX	XXX
ACT12	TX, ARCHER	OUN	XXX	XXX
ADA02	OK, PONTOTOC	OUN	XXX	XXX
ADM	OK, CARTER	OUN	XXX	XXX
ADS02	OK, PONTOTOC	OUN	XXX	XXX
AFS02	OK, GRADY	OUN	AMA	XXX
AFW	TX, TARRANT	FWD	OUN	XXX
AGS02	OK, GRADY	OUN	AMA	XXX
AKA02	OK, ATOKA	OUN	XXX	XXX
ARKK1	KS, COMLEY	ICT	OUN	DOC
ALG02	OK, JACKSON	OUN	XXX	XXX
ALL02	OK, PONTOTOC	OUN	XXX	XXX
ALLT2	TX, WHEELER	AMA	XXX	XXX
ALV02	OK, JACKSON	OUN	XXX	XXX
ALV02	OK, KIOWA	OUN	XXX	XXX
ALV02	OK, WOODS	OUN	XXX	XXX
ALX02	OK, GRADY	OUN	AMA	XXX
ALH02	OK, GRADY	OUN	AMA	XXX

Close Print Save

Service Backup

Access these selections from the **Root Window** by *Clicking on Reports, Text Reports*.

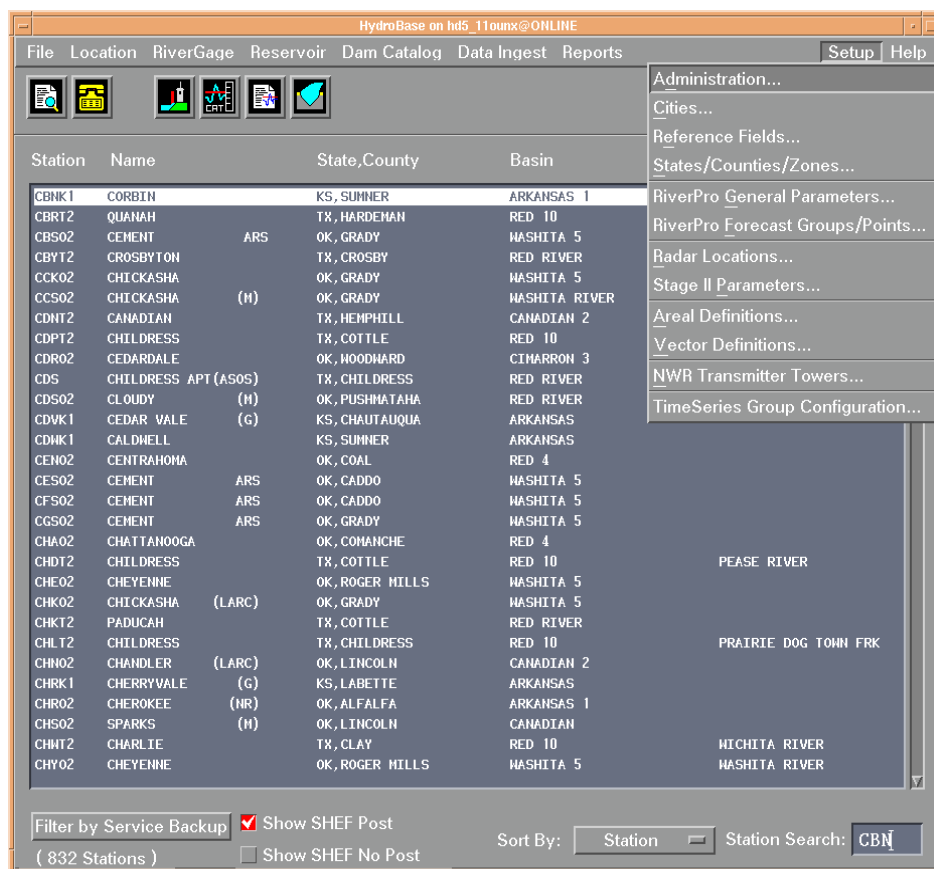
Notes: Use scrolls to display entire report.

Reports are read-only, changes to data or information cannot be made.

Use Report pull-down menu to access the different reports.

Reports can be printed or saved to a specified file.

HydroBase Root Window (Setup selected from the Menu Bar) - Use this selection to view and edit various HydroBase reference data and information applicable to the entire HSA.



Access this selection from the **Root Window** by *Clicking* on **Setup**.

Notes: The use of the windows presented in the Setup pull-down menu is station-independent (a station does not have to be selected prior to selecting a window).

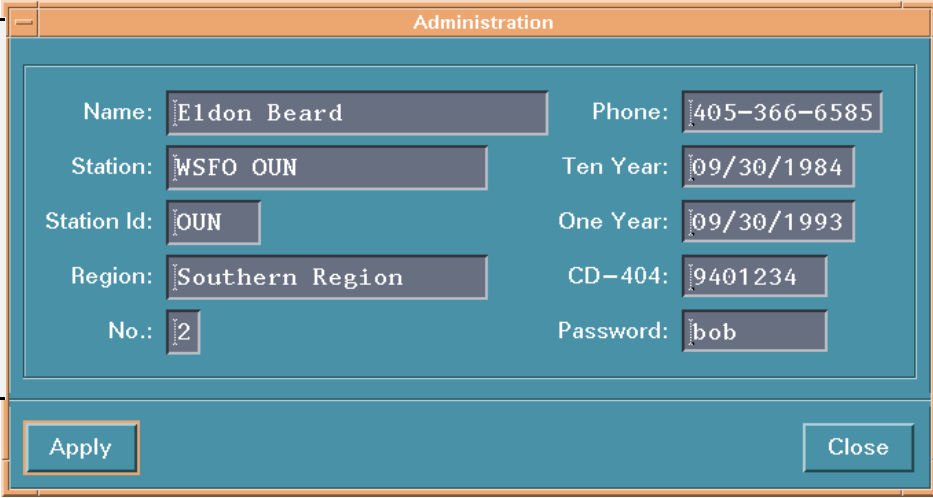
Administration Window - Use this selection to view and edit program administration information and to set the password for accessing HydroBase.

View and edit information.

Name, Station, Station ID, Region, No. (Region No.)
And phone refer to hydrologic focal point (e.g., Service Hydrologist).

Ten Year and One Year
refer to E19A report dates.

CD-404 is reference to the order form for paid observers.



The screenshot shows a window titled "Administration" with a blue background. It contains several text input fields arranged in two columns. The fields are: Name (Eldon Beard), Phone (405-366-6585), Station (WSFO OUN), Ten Year (09/30/1984), Station Id (OUN), One Year (09/30/1993), Region (Southern Region), CD-404 (9401234), No. (2), and Password (bob). At the bottom of the window are two buttons: "Apply" and "Close".

Enter the password used for controlling access to HydroBase. All blanks indicates no password is in effect. There is only one password for all HydroBase users.

Access this selection from the **Root Window** by *Clicking* on **Setup, Administration**.

Notes: This information is station-independent.
The Name/Station/Station Id/Region must be filled out for RiverPro to start up.

Cities Window - Use this selection to view and edit city and town reference information.

Select a city/town to view information (as shown below).

Precedence refers to city or town designation (1 or 2) shown in Display Precedence.

View and edit city information for the selected entry.

The screenshot shows a window titled "Cities" with a table of city data and an "Information" section below it.

City	State	Lat	Lon	Precedence	Pop
ARNETT	AR	35 54 00	94 02 00	2	0
ASHDOWN	AR	33 40 28	94 07 34	1	0
AVOCA	AR	36 24 00	94 04 23	2	0
BARLING	AR	35 19 31	94 18 00	2	0
BASHE	AR	35 19 00	94 26 00	2	0
BEATY	AR	36 27 00	94 31 00	2	0
BELLA VISTA	AR	36 28 05	94 17 40	2	0
BEN LOMOND	AR	33 50 04	94 06 54	2	0
BENTONVILLE	AR	36 22 08	94 12 17	2	0
BENTONVILLE BRANCH J	AR	36 20 00	94 07 00	2	0
BENTONVILLE MUNI ARP	AR	36 21 00	94 13 00	2	0

The "Information" section contains the following fields:

- City: BELLA VISTA
- State: AR
- Lat: 36 28 05
- Lon: 94 17 40
- Cities (1) / Towns (2) dropdown menu (set to 2)
- Precedence: (empty)
- Population: 0

At the bottom of the window are four buttons: Ok, Add, Update, and Delete.

Click on Add, Update, or Delete to add a record, modify an existing record or delete a record

Access this selection from the **Root Window** by *Clicking* on **Setup, Cities**.

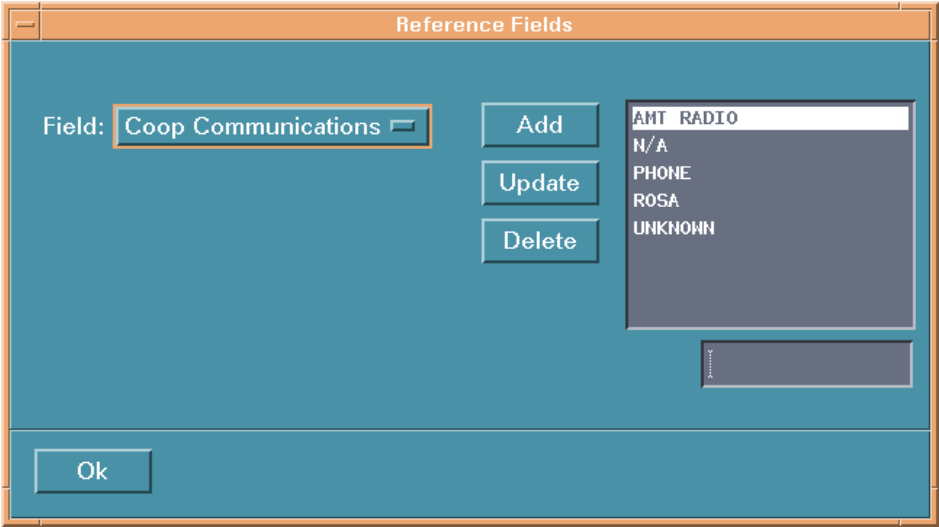
Notes: This information is station-independent.

Reference Fields Window - Use this selection to view and edit the data contributors reference information (e.g., data sources, measurement devices, equipment owners, sponsors and supporting offices).

Select the field to view and edit.

The data field to the right of the window lists all contributors for the selected field item (not all contributors are shown).

Add, modify or delete a contributor



Access this selection from the **Root Window** by *Clicking* on **Setup, Reference Fields**.

Notes: This information is station-independent.
The above field items are attributes of other windows in HydroBase. The values defined in the Reference Fields Window serve to constrain the allowable values of these fields as they appear in other HydroBase windows.

States/Counties/Zones Window - Use this selection to view and edit state, county and zone reference information.

Select state, county and/or zone record(s) to view (as shown below)

Add, edit or delete record(s)

The screenshot shows the 'States/Counties/Zones' window with three main sections:

- States:** A list of states including AK, AL, AR, AZ, CA, CO, CT, DC (selected), DE, FL, GA, GU, HI, and IA. Below the list are input fields for 'State Name' (DC) and 'District of Colum'.
- Counties:** A list of counties for KS, including AL, BARBER, CHAUTAUQUA, CLARK, COMANCHE, COILEY, FORD (selected), HARPER, HASKELL, KINCHMAN, LABETTE, and HEADE. Below the list are input fields for 'State' (KS), 'County' (FORD), 'FIPS' (057), and 'WFO' (DDC).
- Zones:** A list of zones for OK, including 99, 10, 11, 12, 13, 14, 15, 16 (selected), 17, 18, 19, 20, 21, and 22. Below the list are input fields for 'State Num' (OK) and 'Description' (CUSTER).

At the bottom of each section are buttons for 'Add', 'Update', and 'Delete'. A 'Close' button is at the bottom center.

Access this selection from the **Root Window** by *Clicking* on **Setup, States/Counties/Zones**.

Notes: This information is station-independent. States/Counties/Zones must first be defined here. Once they are defined, they are then eligible to be assigned as attributes to individual points elsewhere in HydroBase.

RiverPro General Parameters Window - Use this selection to view and edit various RiverPro parameters.

Edit RiverPro configuration parameters - look back hours for observed data, look forward hours for forecast data, missing data codes, and expiration default hours for products.

RiverPro General Parameters

Time-Span Parameters

Number of Lookback Hours for Observed Data: 51

Number of Lookforward Hours for Forecast Data: 336

String to Use for Missing

Data Value: MSG

Stage Category: MSG

Data Time: MSG

Default Number of Hrs Before Expiration of

RVS: 24

FLS: 12

FLW: 12

Update

Close

Access this selection from the **Root Window** by *Clicking* on **Setup, RiverPro General Parameters**.

Notes: This information is station-independent.
Use the Update button to record any edits.

RiverPro Forecast Groups/Points Window - Use this selection to define forecast groups and to order the groups and their forecast points for tailoring RiverPro displays and generated products.

Select the forecast group to edit the order of groups for RiverPro displays and products.

Click Apply FcstGroup to record any edits.

Select the forecast point to edit the order of the point within the forecast group.

Click Apply FcstPoint to record any edits.

Group Id	Name	Order
NEWGRP1	NEW GROUP 1	5
03CHIKAS	CHIKASKIA RIVER	6
J250TST	J2s 50 Q TEST	7
NCANRVUP	N CANADIAN RVR (UPR)	10
NCANRVMI	N CANADIAN RVR (MID)	11
NCANRVLO	N CANADIAN RVR (LOW)	12
CACHECR	CACHE CREEK	20

Selected Forecast Group

Group Id: Name: Order:

Ordering of Forecast Points within the Forecast Group

Point Id	Name	Order
MDH02	HOODHARD	1
SEI02	SEILING	2

Order:

Use to add a new group or to delete a selected group.

Access this selection from the **Root Window** by *Clicking* on **Setup, RiverPro Forecast Groups/Points**.

Notes: This information is station-independent.

Radar Locations Window - Use this selection to view and edit information and data for radars within the HSA.

Select radar to view information (as shown below).

View and edit radar information.

Add, modify or delete records.

Radar ID	Name	State	Latitude	Longitude	Elevation	Height	Active
123	xxxxxxxxxxxxxxxxxxxx	NJ	-11 02 51	111 11 11	22222222.0	1343.0	F
AMA	Amarillo	TX	35 14 00	101 42 23	3587.0	82.0	T
DDC	Dodge City	KS	37 45 39	99 58 08	2590.0	82.0	T
ERB	ZZZZZZZZZZZZZZZZZZZZ	MD	-88 05 43	-123 57 30	1234567.0	82.0	F
FDR	Frederick (DoD)	OK	34 21 44	98 58 35	1267.0	82.0	T
FWS	Fort Worth/Dallas	TX	32 34 23	97 18 11	683.0	82.0	T
ICT	Wichita	KS	37 39 17	97 26 34	1335.0	82.0	T
INX	Inola (Tulsa)	OK	36 10 30	95 33 53	668.0	82.0	T
LBB	Lubbock	TX	33 39 15	101 48 51	3259.0	82.0	T
TLX	Twin Lakes (Okla Cty)	OK	35 19 59	97 16 40	1213.0	82.0	T

Parameters for Selected Radar

Radar Id: ☒ Active Latitude:

Name: Longitude:

State: Elevation:

Tower Height:

Access this selection from the **Root Window** by *Clicking* on **Setup, Radar Locations**.

Notes: This information is station-independent.

Stage II Parameters Window - Use this selection to view and edit information and data for Stage II parameters for selected radars within the HSA.

Select radar to view information (as shown below).

View gages used in Stage II processing for selected radar.

Edit and update gage list.

All radars using the selected gage are displayed.

View and edit Stage II parameters for the selected radar.

Scroll to view all Stage II parameters.

The screenshot shows the 'Stage II Parameters' window. It contains three main sections:

- Radar ID Table:** A table with columns: Radar ID, Name, State, Latitude, Longitude. The selected row is TLX (Twin Lakes (Okla Cty)).
- Gages for Selected Radar:** A table with columns: Gage ID, Name, Latitude, Longitude. The selected gage is ACD02 (ARCADIA LAKE). To the right of this table are buttons: 'Create Updated Gage List for Selected Radar' and 'Review Create Gage List Log'. Further right is a box titled 'Radars using Selected Gage' containing FDR, INX, TLX, and VNX.
- Stage II Parameters for Selected Radar:** A section with 'General Parameters' including:
 - Processing Method: Standard (dropdown)
 - Buttons: Perform Variance Calcs, Perform AP Removal
 - Min Precip to Display (mm): 0.25 (input), 0.25 (default)
 - Max Radar Precip for QC (mm): 500 (input), 500 (default)
 - Gage Time-Distribution Parameters: Perform Time Distribution (checkbox), Max Num Gages to Use: 5 (input), 5 (default), Max Gage Duration (hrs): 5 (input), 5 (default)
 - Parameters for Assumption of Zero-Precip: Value, Default

At the bottom of the window are 'Update' and 'OK' buttons.

Access this selection from the **Root Window** by *Clicking* on **Setup, Stage II Parameters**.

Notes: This information is station-independent.

Areal Definitions Window - Use this selection to view and edit areal definition information and data for zones, counties, basins and reservoirs within the HSA.

Select the area location type and the area to view information (as shown below).

NumPts refers to the number of latitude and longitude pairs used to define the outline of the area.

View and edit area information.

Use Edit File to edit latitude and longitude pairs that define the outline of the selected area.

Use Review Import Log to view dates of changes to the data files.

Area	Interior	Lat	Lon	NumPts
OKZ000		36 48 42	99 40 23	14
OKZ001		36 43 18	98 50 34	52
OKZ006	Alfa	36 46 47	98 21 54	7
OKZ007	Grant	36 47 46	97 50 02	7
OKZ008	Kay	36 50 17	97 06 29	25
OKZ009	Ellis	36 12 55	99 42 52	32
OKZ010	Woodward	36 26 50	99 17 39	32
OKZ011	Major	36 19 39	98 33 47	25
OKZ012	Garfield	36 21 39	97 44 23	7

Data for Selected Area

Area Id: Latitude: Longitude:

Name:

Import/Export Operations

Import/Export File:

Access this selection from the **Root Window** by *Clicking* on **Setup, Areal Definitions**.

Notes: This information is station-independent.
 The import of data into the database from a file (Import/Export Operations) may take 5-15 seconds to complete.
 ASCII files of the base data for the map backgrounds are located in the */awips/hydroapps/whfs/local/data/geo* directory.

Vector Definitions Window - Use this selection to view and edit vector definition information and data for rivers, streams, highways and roads within the HSA.

Select the vector location type and the vector to view information (as shown below).

Number of Points refers to the number of latitude and longitude pairs used to define the vector.

View and edit vector information.

Use Edit File to edit latitude and longitude pairs which define the selected vector.

Use Review Import Log to view dates of changes to the data files.

The screenshot shows the 'Vector Definitions' window. At the top, there's a 'List:' dropdown menu set to 'Highways'. Below it is a table with three columns: 'Vector Id', 'Name', and 'Number of Points'. The table lists several vectors, with 'R1I35' and 'R1I40' appearing multiple times. The 'Number of Points' for 'R1I35' is 49 and 529, and for 'R1I40' it's 202, 381, 71, 60, and 36. Below the table is the 'Import/Export Operations' section, which includes an 'Import/Export File:' field with 'hiways.dat', an 'Edit File' button, an 'Import File into Database' button, a 'Review Import Log' button, and an 'Export Database Info into File' button. At the bottom left is an 'OK' button. To the right of the main window, a 'Text Editor - hiways.dat' window is open, displaying a list of latitude and longitude coordinates for the selected vector.

Vector Id	Name	Number of Points
R1I35	XXX	49
R1I35	XXX	529
R1I40	XXX	202
R1I40	XXX	381
R1I40	XXX	71
R1I40	XXX	60
R1I40	XXX	36

Example Data File

```

R1I35 XXX -1 49
36.9989 97.3425
36.9933 97.3453
36.9972 97.3475
36.9794 97.3486
36.9717 97.3492
36.9636 97.3489
36.9558 97.3457
36.9497 97.3458
36.9433 97.3464
36.9411 97.3483
36.9242 97.3486
36.9161 97.3500
36.9092 97.3514
36.9025 97.3519
36.8972 97.3522
36.8928 97.3522
36.8864 97.3519
36.8808 97.3519
36.8747 97.3506
36.8694 97.3489
36.8636 97.3461
36.8594 97.3439
36.8561 97.3414

```

Access this selection from the **Root Window** by *Clicking* on **Setup, Vector Definitions**.

Notes: This information is station-independent.
 ASCII files of the base data for the map backgrounds are located in the
 /awips/hydroapps/whfs/local/data/geo directory.

NWR Transmitter Window - Use this selection to view and edit NOAA Weather Radio (NWR) transmitter information.

Select a specific transmitter, then edit the appropriate field(s) in the work space below. Use Clear to clear all data and information, use Delete to delete the transmitter from the data base, and use Apply to effect the changes.

County coverage can be modified by adding a county from the Available Counties list or deleting a highlighted county.

NWR Transmitter

NWR Transmitter Information

Call Sign	WFO	Transmitter City	Transmitter County, State	Coverage Area	Lat	Lon	Freq.	Power	Code Num.	Prod. Cnty.
AAAAA	LUB	BBBBBBBBBBBBBBBB	XXXXXXXXXXXXXXXXXX	CCCCCCCCCCCCCCCCCCCC	00 00 00	00 00 00	123.456	9999	N29	9999 F
KEC55	FND	CROHLEY	, TX	FORT WORTH	32 32 13	97 24 46	0.000	0	NH1	000 T
KEC56	FND	DALLAS	, TX	DALLAS	32 55 19	96 45 01	0.000	0	NH2	000 T
KEC59	ICT	NICHITA	, KS	NICHITA	37 45 00	97 18 12	0.000	0	NH3	000 T
KIH27	TSA	COMETA	, OK	TULSA	36 01 08	95 39 24	0.000	0	NH4	000 T
NERB	DDC	Center City	, KINGMAN	KS area just south of Austin	65 43 21	123 46 07	162.425	500	N30	33 T
NHF42	OUN	PONCA CITY	, OK	PONCA CITY	36 45 32	97 09 36	0.000	0	NH5	000 T
NHG22	DDC	TRIBUNE	, KS	TRIBUNE	38 27 22	101 38 56	0.000	0	NH6	000 T
NHG46	OUN	HOODHARD	, OK	HOODHARD	36 22 37	99 28 30	0.000	0	NH7	000 T
HRJ49	SHV	TEXARKANA	, AR	TEXARKANA	33 26 53	94 04 04	0.000	0	NH8	000 T
HRJ50	TSA	FORT CHAFFEE	, AR	FORT SMITH	35 17 38	94 18 25	0.000	0	NH9	000 T

Call Sign: ☒ Active Programming WFO: Coverage Area:

Lat/Lon: Frequency(Mhz): Power(Watts): Product Code:

City: County/State: Pseudo County Number:

County Coverage Information

Counties covered by Transmitter: WVG46

CLARK	KS
COMANCHE	KS
BEAVER	OK
CUSTER	OK
DEWEY	OK
ELLIS	OK
HARPER	OK
MAJOR	OK

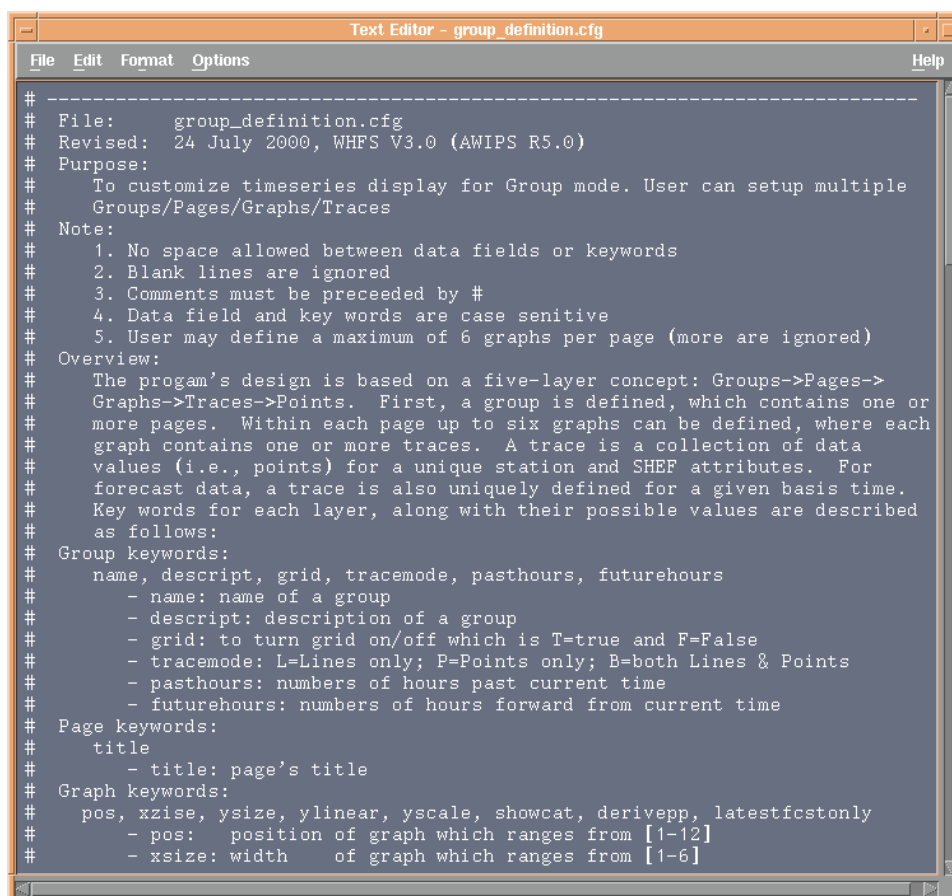
Available Counties

BARBER	KS
CHAUTAUQUA	KS
CLARK	KS
COMANCHE	KS
COMLEY	KS
FORD	KS
HARPER	KS
HASKELL	KS

Access this selection from the **Root Window** by *Clicking* on **Setup, NWR Transmitter Towers**.

Notes: This information is station-independent. Transmitter information must be properly defined for RiverPro to create NWR products. See Chapter 5 of the *RiverPro Reference Manual* for additional information. (The *RiverPro Reference Manual* has been included as Appendix B of this manual)

Time Series Group Configuration Window - Use this selection to configure and edit grouped time series displays.



```
# -----
# File: group_definition.cfg
# Revised: 24 July 2000, WHFS V3.0 (AWIPS R5.0)
# Purpose:
# To customize timeseries display for Group mode. User can setup multiple
# Groups/Pages/Graphs/Traces
# Note:
# 1. No space allowed between data fields or keywords
# 2. Blank lines are ignored
# 3. Comments must be preceeded by #
# 4. Data field and key words are case sensitive
# 5. User may define a maximum of 6 graphs per page (more are ignored)
# Overview:
# The program's design is based on a five-layer concept: Groups->Pages->
# Graphs->Traces->Points. First, a group is defined, which contains one or
# more pages. Within each page up to six graphs can be defined, where each
# graph contains one or more traces. A trace is a collection of data
# values (i.e., points) for a unique station and SHEF attributes. For
# forecast data, a trace is also uniquely defined for a given basis time.
# Key words for each layer, along with their possible values are described
# as follows:
# Group keywords:
# name, descript, grid, tracemode, pasthours, futurehours
# - name: name of a group
# - descript: description of a group
# - grid: to turn grid on/off which is T=true and F=False
# - tracemode: L=Lines only; P=Points only; B=both Lines & Points
# - pasthours: numbers of hours past current time
# - futurehours: numbers of hours forward from current time
# Page keywords:
# title
# - title: page's title
# Graph keywords:
# pos, xsize, ysize, ylinear, yscale, showcat, derivepp, latestfcstonly
# - pos: position of graph which ranges from [1-12]
# - xsize: width of graph which ranges from [1-6]
```

Access this selection from the **Root Window** by *Clicking* on **Setup, Time Series Group Configuration**.

Notes: More information about the configuration and use of time series groups is contained in Appendix D, *WHFS Time Series Function*. In addition, information may be found on the WHFS Support web page. Specifically, see: http://www.nws.noaa.gov/oh/hod_whfs/Build_5/ts_config_grp_defn.htm.